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STATE BOARD OF HEALTH OF FLORIDA

TWENTY-THIRD  
ANNUAL REPORT

OF THE

State Board of Health  
of Florida  
1911

APPROVED BY THE BOARD IN ANNUAL  
SESSION, FEBRUARY 2 AND 27, 1911

JACKSONVILLE, FLORIDA  
WITH VOL. VI (1911) FLORIDA HEALTH NOTES





ADMINISTRATIVE BUILDING, STATE BOARD OF HEALTH, JACKSONVILLE, FLA.

*Compliments of*

*Dr. Joseph Y. Porter,*

*State Health Officer of Florida*

Form 103



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MARCH, 1912

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WITH VOL. VI (1911) FLORIDA HEALTH NOTES

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# STATE OF FLORIDA

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## LETTER OF TRANSMITTAL

TAMPA, FLORIDA, February 27, 1912.

*To the Honorable A. W. Gilchrist,*

*Governor of Florida, Tallahassee:*

SIR: I take pleasure in enclosing you a record of work of the State Board of Health for the past year, as compiled by the State Health Officer, a pleasure none the less agreeable because required by the statutes of the State.

I trust that you may have the time and may be sufficiently interested in the subject of the public health to give careful consideration to this report, because certain features are discussed which, arising in the state during the year, have brought more prominently into view circumstances relating to a rational and economical management of disease transmission and spread. The whole subject, which has a wide range, is so concisely and clearly stated by Dr. Porter that I do not think it necessary for me to enter into a more detailed explanation except to say that with my colleagues I agree entirely in the policy which Dr. Porter recommends respecting the management of smallpox, as well as what should be the course pursued by the Board in conducting the affairs of the Health Department of the state. The desire of the Board is to educate the people in matters which will conserve their health, and to direct their thoughts in channels that will effect that purpose. We appreciate this fact, that patient effort and persistent reasoning and arguing will do more in the long run to convince the wayward and prejudiced than the employment of more forceful measures, such as haling before the courts of the state; yet where individuals, by their conduct and perverse actions, are likely to menace the health and perhaps the lives of their neighbors, we believe that due example should be made of such offenders. As long as pacific measures will accomplish the same object, the State Health Officer, acting for the Board, will follow such a course, which is a far pleasanter procedure to him.

Among other worthy subjects referred to by Dr. Porter and afterwards embraced in a recommendation, I think none better than his suggestion that the area of malarial infection in the state should be looked into and such measures taken by the Board as will limit the infection and lessen the disastrous sequences of this trouble. Undoubtedly, malarial and hookworm disease are improv-

erishing factors which in this state as well as elsewhere diminish the earning capacity of the individual citizen, because the hookworm parasite in early life so depletes the mental and physical health of the child that it is a rare thing the system is able to throw off its pernicious effects and adult life is reached with a feeble mentality as well as a physical weakening. So, too, repeated attacks of malaria produce such a state of anemia, that is to say, reduces blood strength, that after a while an invalidism is caused which finally results in death. In both of these disorders the earning capacity of the individual is cut down, with a proportionate increase thereby in cost of living and maintenance. Thus it is reasonable to conclude that ill health from these causes as well as sickness from any cause tends to exhaust the financial resources of the commonwealth by adding ill afforded burdens. I believe, therefore, that the State Health Officer should be encouraged to pursue the line of investigation which he suggests, and that the expense thereof should be authorized. In discussing these and other matters connected with the administration of health affairs in the state, he tells me that he considers the principal enemies to good health in Florida, and against which an aggressive campaign should be waged, are hookworm, malaria, typhoid fever and tuberculosis. The first two he believes have been oftentimes confounded in the past, as well as the second and third; and if people can be instructed to distinguish these diseases and promptly secure assistance, lives would be saved and much ill health prevented. I am in favor of affording every opportunity to the State Health Officer and his executive force of assistants to prosecute these investigations, believing that the state will reap a harvest of good health as a result of such work.

Another point in the State Health Officer's report which I wish to allude to is this: unlimited discretionary authority in dealing with purely sanitary matters and such occurrences which may not be specifically outlined by the statutes or made mention of in the rules and regulations of the Board. And right here and in this connection I wish to call your attention to another common-sense proposition. If the State Board of Health is charged under the Constitution with conserving and protecting the health of the citizens of Florida, then that which is necessary to accomplish this purpose should be followed and carried out by the executive officer, irrespective of any lack of specific authority which may be thought to

be limited by regulation or statute, and which, as the State Health Officer says, could not have been anticipated by the Legislature when framing the law, because all exigencies and emergencies likely to arise and affecting health can never be anticipated nor provided for.

Year by year—most certainly has it been so since I have been presiding over the Board—the Board has increased in the confidence of the people until, at the present time, whenever any deviation from the normal condition of health occurs in any community, almost immediately an appeal is made to the Board to correct defects in sanitation or to place in operation such factors as will relieve anxiety and remove complaints. It is quite true that often complaints are ill-founded and unreasonable, and when such occur the complainants are so advised and reasoned with; but I believe that the people have a right to expect due attention and a relief from the Board whenever it is practicable and possible to afford it. This can hardly be effected if the Board and the State Health Officer, as executive officer of the Board, are held to a strict interpretation of the letter and not the spirit of the law.

After due consultation with the comptroller of the state, and after receiving from the city of Jacksonville a plat of land in a desirable section of the city, the Board has constructed this year a commodious building for executive offices and for the central bacteriological laboratory of the Board. The conditions of the gift were that the Board should erect a building which would be commensurate with the value of the gift by the city of Jacksonville, and it is believed that the Board has fulfilled its part of the compact.

Several measures respecting health management passed by the last legislature are capable of great good to the people if carried out and their requirements fulfilled, and of these the ordinance requiring screening of kitchens, dining rooms, and walk ways thereto against flies, to my mind, is the most important of the measures passed, not only because keeping flies away from food will assuredly lessen the chances of sickness of a fly-borne character, but because the introduction of such a regulation into the state assembly, with a discussion which naturally follows, reflects a growing sentiment of confidence in the state in the State Board of Health and its counsel; for you will remember that something over a year ago at a called meeting of the Board at Tampa, on the advice of the State Health Officer, two rules relating to screening against flies and against mosquitoes were passed and promulgated. Of



course, there was the usual protest on the part of some that the Board was attempting to invade the sacred rights of personal privilege of the citizen, but the rule set in motion a step of sound thinking and reasoning on the part of the more thoughtful portion of the commonwealth, which the lawmakers executed as a result of that thinking.

The execution of laws pertaining to health administration is not, however, a part of the duty of the State Board of Health, nor is the executive officer charged with the functions of a prosecuting official of the state government. Unfortunately, too many of our citizens have this wrong impression, and when to their minds the health statutes in full or in part are being violated or ignored, it is difficult to make them understand that the courts of the state should be appealed to to rectify or remedy these transgressions against public health, and not the executive officer of the Board.

It is pleasing to state to you that the bacteriological laboratories of the Board continue to afford the citizens assistance which is both mitigating as well as preventive in dealing with sicknesses when time and accuracy mean so much in arriving at a definite knowledge of the character of the ailments under treatment. It is believed from the commendatory mention of the work of these laboratories which has come to my attention in conversation with the lay public and in other ways, that the laboratory work of the Board is much appreciated by the people of the state and that there is no disposition to criticise the expense incurred in maintaining these very essential institutions.

The State Health Officer invites attention to the subject of reimbursement by the State Board of Health for animals killed in the state as a result of certain contagious diseases. He points out—but with no apparent intention of criticising the acts of the legislature—the seeming injustice of paying for glandered animals which were killed under the law, at full appraised value in one instance, and being restricted by general statutes from doing so in all cases. As I understand the subject, glanders in animals is a disease which for all practical purposes is incurable, or, if curable at all, at great expense to the owner by reason of time required to effect the same; and further, that only a small portion of those treated ever recover. The law is that such animals shall be killed by order of the State Health Officer, after an appraisal has been made by the representative of the owner, a representative of the State Health Officer

and the veterinarian of the State Board of Health. But here is where there is always likely to arise confusion and misunderstanding. Notwithstanding the appraised value of each animal, the law specifically says that not more than \$75.00 shall be paid for any one animal, and even then that payment cannot be made to one person for more than ten animals in any one year, and further provides that the animals shall have been in the state a year before payment or reimbursement can be considered. It is doubtful to my mind, as it seems to be to the State Officer, whether the funds of the state should be used in payment to individual citizens for calamities of this kind. Losses of each and every kind are to be deplored, but I see no good reason why the state should pay for animals killed on account of glanders any more than it should reimburse the citizen for a destruction caused by frost, cyclone or fire. And this reasoning I consider especially sound when the general law is set aside to admit payment for glandered animals which had not been in the state the specified time, or where the infection seems to have been retained against the advice of the veterinary health authority of the state. A remodelling of this law seems to me to be greatly needed in order that discrimination may not be made in the future, and some confusing features eliminated.

The State Health Officer, in tables submitted, gives the number of specimens examined at the three laboratories as 20,233, and enumerates very interestingly the number studied at each. Not only are statistics of this nature given, but the cost per specimen examined is also stated, thus affording the reader an accurate idea how the funds of the state are expended for the benefit of the people. Eighty-one cents is a small sum of money compared with the value of information gained by the medical attendant as to whether his patient is suffering from malaria or from typhoid or from diphtheria or simple tonsillitis, in point of time, which means so much in the successful treatment of these disorders.

Continuing this line of thought, it is pertinent to say that, while the expenses of the Board have been greater for the past year, yet in the total amount of money expended by the Board, aside from the cost of erecting the building already alluded to, every cent has been devoted to the welfare of the people in providing measures for the suppression of disease, in an attempt to educate them in methods of health improvement and to a removal of causes



which, left undisturbed, will in time cause a lowered vitality and civic physical degeneration.

In this desultory way, and with no attempt to a finished academic production, I have tried to indicate to you the salient features of the report which is herewith enclosed, with commendatory mention of the very excellent administrative management which has characterized the health scheme of the year by the executive office of the Board.

Respectfully,

E. M. HENDRY,  
*President, State Board of Health.*

## REPORT OF THE STATE HEALTH OFFICER

*To the President of the State Board of Health of Florida:*

In order that you may comply with the requirements of the state statutes which make it obligatory upon you to prepare for the governor a report upon what has been done by the Health Department of the state for the preceding year, with such recommendations as may seem to you to be both wise and necessary, there is herewith submitted for the consideration of yourself and the other members of the State Board of Health, and, it is hoped, your approval, a recital of the work of the executive office for the year 1911.

### GENERAL HEALTH CONDITIONS

It is gratifying to be able to state that on the whole the health of the state for the past twelve months has been good and above the average. This statement, however, cannot be verified by figures and must be accepted in a very general way, because the executive office has no means by which it can glean such information except from correspondence, which is always apt to be faulty and to deal only in generalities. Almost daily requests come from distant states, principally from the northwest, where companies are organized for the sale of Florida lands, asking about the health conditions of certain sections of Florida; whether malarious, or whether detrimental or advantageous to sufferers from certain chronic ailments. Information of this kind, which should be at the command of the executive office, cannot always be given for the reason that no system of morbidity statistics which have hitherto been devised so far has met with success, although several have been attempted. It may be asked why this necessary information has not been secured for the Board. Most certainly the failure is not due to lack of persistent efforts on the part of the State Health Officer, for the records are in evidence of earnest pleading and in suggesting simple methods for obtaining facts of this nature.

### VITAL STATISTICS

On more than one occasion the State Health Officer has pointed out to the Board the want of interest on the part of those from whom alone this information can be gotten and who should be especially concerned about the vital statistics of the state, viz.,

the active practitioners of medicine. It is a humiliating situation to the executive officer that Florida, through this indifference, should be excluded from the registration area of the United States, and that which is believed to be true and is the boast of our people—that the climate of Florida is healthful and life-prolonging—cannot be verified by actual statistics. In facts sustained by figures lies conviction and not in mere statements or brag. Therefore, until our medical men, generous, sympathetic and philanthropic in all other respects, will awaken to the supreme benefit which information of this kind will be to our state, and will report to the executive office the number and classes of sickness, together with the number of births and deaths occurring in their practice, there is but little hope held out that accurate figures can be made at the end of each year, and not speculative data, unless the State Board of Health considers that such service to the state is of sufficient importance to warrant a paid corps of collectors and enumerators to be yearly employed.

Vital statistics, embraced in a collection of birth and death returns, are valuable as showing the physical movement of population, and as an index—a pointing out—to the sanitarian where his services in behalf of the living are the most needed, but as a proposition of social economics is not as valuable to the living as morbidity statistics. The dead cease to be a cause of loss or expense after burial, except as indirectly affecting the living who may have been dependent upon them for support; but the sick and chronic ailing are a constant burden and monetary care to themselves, their families or to the community and the state, and investigations which can be made which will cause a lessening of suffering and a betterment of conditions for the living, and lessened expense, are more in the line of an advanced sanitary movement than a compilation of deaths and causes of deaths. The future effect upon mankind in general, through death of even distinguished and influential persons, is more one of sentimental hysteria than of actual fact, particularly when each has fulfilled his biological function by providing for offspring; because the same All-Wise Providence which permits the Reaper to cut off a life or the woodsman to uproot a giant oak will supply the germ of one or the acorn of the other to the fullest strength of equal intellectual manhood or womanhood in another being, or another tree of like ambrosial beauty and grandeur.

Mortality statistics tell of the number of deaths from certain diseases in weeks, months and years. For instance, they tell of the number dying from tuberculosis or malaria or diphtheria in a given space of time, but they do not give the information of how many persons are now sick from those selfsame diseases, and the paramount duty of health officers and sanitarians is to the living and to an effort to relieve suffering as well as to institute methods for reducing a monetary loss which sickness always causes.

Therefore, it would seem that the argument in favor of morbidity statistics is stronger by far than for mortality returns, although both are instructive and useful, but unfortunately, both are difficult to obtain with any degree of accuracy, under the present system of voluntary reports. It is a perplexing matter and one, too, it is mortifying to confess, that the executive office cannot speak authoritatively and accurately upon the general health situation of the state, because the information sought for, although theoretically possible, is, under existing conditions, impracticable to obtain.

#### PROGRESS IN SANITATION

While there have been no diseases which have assumed epidemic prevalence, and the peace and comfort of the citizens of Florida have not been disturbed by extravagant or startling rumors of sickness, yet, perhaps to the discredit of our intelligent citizenship, very many of the fatal illnesses which have served to increase the death roll of the state for the past year, have been of a preventable character; by that is meant that many of those who unfortunately died might have been yet alive if the gospel of sanitation embraced in the creed of "how to live" had been both heeded and followed. Death and decay is the natural order of physical debt which all must pay and which each must pay in order that the race may be perpetuated, and it is a lamentable fact "that as soon as we commence to live, that moment we begin also to die," but it is also a very gratifying fact to know and to state that through educational methods and persistent efforts the health boards of the country have been able in the past thirty years to reduce the death rate in this country—the United States—over twenty-four per cent, and that human life has been lengthened on the average of some eight to ten years. It is a rare thing nowadays to meet with an intellectual man or woman, one whose field of education has been broad-



ened and cultivated in a more than general way, who does not speak of and speak interestingly about sanitary matters and who does not show a questioning interest and general information upon subjects relating to the prevention of disease which years ago was imagined only to belong to the mystery of medicine and to the medical profession alone, who then were thought to have a preemption claim on this supposedly veiled knowledge.

The popular magazines have done much in monographs and articles to create special interest in the subject of rightful and healthful living, and while statements have been made from time to time which the truth of science in its analysis of the subject would hardly sustain, yet in the majority of instances the writers have aroused an interest which tended to further inquiry into the subject, thus bringing out the prominent and principal points of useful information. Therefore, too much credit cannot be given to editorial writers and makers of magazine articles for the valuable aid which they have recently given to boards of health and to those who are engaged in educational sanitary work.

Preventive medicine is rapidly taking the place of drug medication and, strange as it may appear, the quick strides which this idea of benefiting and lengthening human life had advanced and assumed is due to the persistent efforts of the medical profession which, always to the fore in matters of Christian philanthropy, has recognized that in agencies which will prevent the occurrence of disease lies the Utopian hope for prolonging life and in this way increasing the usefulness of the human race.

Antitoxins, sera and vaccines of different kinds, the object of the administration of which is to prevent certain specific diseases, as well as to exert a mitigating influence over sickness of a contagious character, are, with but one exception, discoveries of recent years—scarcely fifty years old—and, as has already been remarked, have by their use decreased the mortality of the United States something like twenty-five per cent, and in two of the diseases which have hitherto claimed large numbers of victims yearly, the mortality has been reduced: for typhoid fever nearly fifty per cent, and for diphtheria nearly eighty per cent. It will be seen, therefore, that in a more active use of these antitoxins, sera and vaccines the death rate can be still further decreased and prospective useful citizenship wonderfully increased.

As the Board publishes each month a pamphlet which deals with the health problems that arise, it is not thought necessary to engage your attention at this time in a re-discussion of such topics, which, always interesting and ever presenting new phases for consideration, would, nevertheless, take up too much space in a narrative report of this kind. The *Notes*, as the monthly pamphlet is termed in shortened speech, for the year 1911, will be bound with this communication and forms a part and parcel of one-half the edition of the Annual Report of the State Health Officer. The purpose of its editors is to talk in a plain way, omitting technical terms and theoretical suppositions, and to write for the people rather than for the profession, so that advice given or facts stated may be understood and thus prove of benefit, if accepted, to every person who will take time or have an interest in the all-important subject of health and health-producing agencies as well as in means and methods of preventing sickness, which latter, as has been before said, as an economic problem, entails expense as well as individual suffering and discomfort.

#### COMMUNICABLE DISEASES

Elsewhere in this report will be found in tabulated form the communicable diseases which have been reported to the executive office of the State Board of Health during 1911, with number and counties where occurring. The state statutes charge the State Board of Health with the supervision and care of only three of the communicable sicknesses—cholera, yellow fever and smallpox, all others to receive advisory management except when prevailing in an epidemic form.

#### SMALLPOX

Of these three, smallpox is the only disease which has caused concern or annoying supervision to the executive office. The northern border counties of the state, more than other localities, have continued to have cases crop up now and then, by reason of their proximity to states where it seems no provision is made or effort put forth to control its spread. The migratory negro, passing back and forth across the state line, as the demand for labor invites this class to seek work, has served to keep lighted the fires of contagion among those who have not been vaccinated and who refuse this protection.



The state statutes make it obligatory on the State Board of Health to take cognizance of and to employ such measures as the executive officer may think necessary to control and prevent its spread, but that protection that of all others, and it should be more emphatically expressed, *which can alone stamp out smallpox* and forever terminate it, the legislatures have refused to enact into statute law, and the Board, aware of the prejudice and antagonism, has avoided further recommendations in this direction, feeling confident that in due time the citizens of Florida will be convinced of the soundness of the advice which has been so frequently, persistently and emphatically given by the State Health Officer in these reports and in the *Health Notes*, and in righteous indignation against a sinful expenditure of state money for an easily prevented disease, demand a universal vaccination of the people of the state, especially of the laboring class who may be imported to work in large industrial plants.

#### MANAGEMENT OF SMALLPOX

Letters upon letters come to the State Health Officer asking "for protection against smallpox," as if he possessed some mysterious wand with which he could, by its wave, drive away the malady. Communities want to quarantine, and individuals wish to drive out the unfortunates, and it must be admitted, the ignorantly obstinate—for if not obstinate they would be vaccinated and thus protected—who have contracted this loathsome disorder. The thought uppermost in the minds of most of these correspondents is *quarantine*, as if quarantine of smallpox ever did any good or could be made effective against the hundreds of cases which are so mild in character as to be unrecognizable except by the most expert authority, and oftentimes so mild and trivial then that even one well versed in the detection of cases feels himself incompetent to make a decision.

It seems to be entirely forgotten—if the thought or consideration of the subject is ever seriously dwelt upon—that the communicable diseases vary in their severity according to latitude, and that such diseases have a far different potential significance in the northern portions of the United States than the same diseases in the southern states, and yet it is proposed that there shall be but one system and one plan carried out to control. Certain of the communicable diseases, such as scarlet fever, measles and smallpox,

seem to be more clearly accentuated, if such a term can be used, in the colder portions of the country than in the warmer latitudes. The facies of these particular diseases is recognized and detection is almost sure and easy. They are text-book cases, but it is entirely different with these diseases when happening in warm latitudes and countries. Here the symptoms are slight, occasioning but little discomfort and rarely confinement to bed, and it is not plain to see, in these mild cases where and when no physician is called in—for a physician's call means money going out—and without information to the health authorities, how such cases can be quarantined when even the parents or individuals themselves are ignorant of the nature of the sickness from which they are but slightly indisposed. How, then, would a quarantine of one such case be any protection to a community where many others unrecognized are running at large? This pertinent fact applies with greater force to smallpox than to the other communicable diseases, because against smallpox a protection has been discovered and when accepted is as sure in its sheltering care as is an asbestos house against the destructive force of fire.

The state statutes directing the reporting of cases of smallpox, to which reference has already been made, also prescribes what disposition shall be made of them and gives discretionary authority to the State Health Officer in the management; therefore, having tried quarantining smallpox and having found that such a method did not tend to abate the spread of the disease nor to lessen the number of cases, this system of management has been abandoned and is now replaced by caring for the indigent and by allowing a per diem for maintenance and such medical attention or nursing as the severe cases call for. Imperative instructions are given the sick to keep off the public highways and out of public places under penalty of arrest after recovery for violating the mandates of the State Health Officer approved by the State Board of Health. Guards for smallpox patients are not permitted nor is such a course of management sanctioned by municipal authorities, even if the municipality is willing to defray the expense, because, as already stated, all cases are not reported, neither recognized, and it is the unrecognized cases which keep the flame of contagion alive and spreading.

It is past all reasonable understanding why some people will persist in opposing vaccination by arguing against its protective



ability to prevent the spread of smallpox and in stamping out the disease in a community, state or nation. Facts are facts—they cannot be disputed, cannot be disproved, and more than once in the past year smallpox has been wiped out of a community in this state by no other means than by general vaccination. When everybody is immunized against smallpox, there is no more food for the disease to feed upon and it dies out.

The utter futility and, it can well be said, absurdity of trying to control the spread of smallpox by guards and even by isolation, except in towns and communities having a well organized police control and protection, is fully shown by the numerous incidents daily occurring where cases of smallpox, so mild as to escape detection of physicians and causing so trivial inconvenience as to incite no suspicion in the patients themselves, which walk the streets or pursue their usual work or business, thus coming in contact with many who are unprotected by vaccination. Not many months ago a negro porter of the pullman service came to the executive office asking for vaccination. On baring his arm for the operation it was discovered that he was then recovering from a well-marked but mild case of smallpox. For between two and three weeks this man had been traveling between New York and Jacksonville in the employ of the Pullman Company. If it were possible to obtain the information, it would be interesting to know the sequel of his exposure to unvaccinated passengers. In another instance a young lady from well-to-do family sought vaccination at the executive office of the Board, and, as in the case of the negro porter, it was discovered that she, too, was recovering from a mild case of smallpox. She had noticed the eruption, but her family physician had told her that she was suffering from a mild skin trouble, and, acting on this advice, she had not restricted her movements, as she did not feel sick, and had gone to and fro as she wished. She had visited moving picture shows, Sunday School and, in fact, had not limited her intercourse with other members of the family or with her friends. But in due course of time the other members of the family, six in all, except a sister who had been vaccinated, all experienced the same eruption and in a marked degree of severity. It is needless to add that in both of these instances, that of the young lady and the negro porter, neither had been vaccinated.

Again there are instances where cases are deliberately concealed from the authorities and are only found after prolonged search.

Assistant State Health Officer Byrd on one occasion found a negro with smallpox hidden between mattresses, after a positive denial by the inmates of the house—friends of the patient—that there was any sickness in the house; and quite recently Assistant State Health Officer Young, reporting upon a case of smallpox, says: "This morning the chief of police came to me and reported that there was a case of smallpox in the colored section of the town. Investigating the rumor, I found a young mulatto man concealed in the upstairs of a dwelling in the center of the colored settlement, who was in the beginning pustular stage of a discreet type of the disease."

Assistant State Health Officer Diggett a few weeks ago stated in a report on smallpox: "I have to report three cases of smallpox on the Miles Johnson plantation, three miles out of town (Tallahassee); these cases have been isolated. Last year Dr. Moor and myself vaccinated Miles Johnson's negroes with the exception of the *three cases reported above*; they refused vaccination."

That a wave of smallpox would spread over the United States and that Florida would not escape has been told to the people of the state by the executive officer of this Board during the past ten or more years, in no doubtful or uncertain language, and the people have been urged time and time again to protect themselves against a disease most loathsome in its sickness, disfiguring in its sequences and destructive to life, by the only means known to mankind, and that is by *vaccination*. The warning has not been heeded and the crest of high water in this disease is being reached this year; on the other hand, the views of paranoics and persons utterly ignorant of the subject which they try to discuss and incompetent to express an opinion have been aired in direct opposition to the judgment of those who by experience and education are fully equipped to advise on all subjects relating to the care and preservation of the public health. Not only have the people been advised against accepting and following the earnest persuasion of the State Health Officer, but he and his assistants have been abused and villified because, having the courage of their convictions, they have continued to preach vaccination in season and out of season. Now that the prediction of the State Health Officer as to the increase of smallpox in the country and in this state is being fulfilled, the occasion cannot be lost to ask, "Who had the welfare of the people more at heart, the official who knew what he was talking about

or the vaporings of the demagogue who was playing to the gallery of ignorant prejudice and obstinacy?"

In the last Annual Report of the State Health Officer, mention was made of vaccination alone and nullifying every effort by guards as a method of management, and although no recommendations were suggested for further enactment by the legislature of this nature, yet it was then stated that this had been the policy of the State Health Officer for the past few years and unless the legislature, soon then to assemble, saw fit to forbid such management, that there would be no quarantine and no guards, but a gratuitous offer of vaccine, with free administration, would be the future course of action of the executive office. The legislature of 1911 met and adjourned, and it is supposed that the report of the State Board of Health for 1910 was read and approved, and as no negative legislation to this ruling was enacted at that session, it may be taken for granted that the wisdom of this plan for the management of smallpox in this state is approved of and sanctioned.

Much more could be written and could be said on this subject, which has so much to recommend it for simplicity of management and so much real sense to commend it, but the topic has been discussed at length in the *Health Notes* very frequently during the year and it will be sufficient to say in conclusion that unless the Board shall direct otherwise the State Health Officer will place his main reliance for the control of smallpox on *vaccination*, and that it may as well be understood first and last that he is unalterably opposed to the use of the word *quarantine* in the management of any of the communicable diseases, *but* he will enforce segregation and isolation wherever and whenever cases of communicable disease designated by the statute are brought to his attention or knowledge.

#### *Smallpox Tides:*

Smallpox runs in tides. We have high tides alternating with low tides. Jacksonville is having a high tide now during the late winter. Within a few weeks it will be low tide. The time from tide to tide is from six to twelve years.

Not only do cities have their high tides and low tides, but the state has its high tides and low tides. There is a tendency for all the cities to have high tide at about the same time, and that makes a high tide for the state.

Florida had a high tide in 1900—about 3000 cases. Then in 1902 and 1903 there were less than 300 cases. But in 1911 there was another high tide, reaching nearly 3500 cases. It may be confidently expected to drop in a year or two.

Vaccination, like smallpox, has high tides and low tides. Vaccination runs a perfect parallel with smallpox. When the smallpox tide rises, the vaccination tide rises. When the smallpox tide falls, the vaccination tide falls. The higher the smallpox tide, the higher the vaccination tide rises. The lower the smallpox tide, the lower the vaccination tide is.

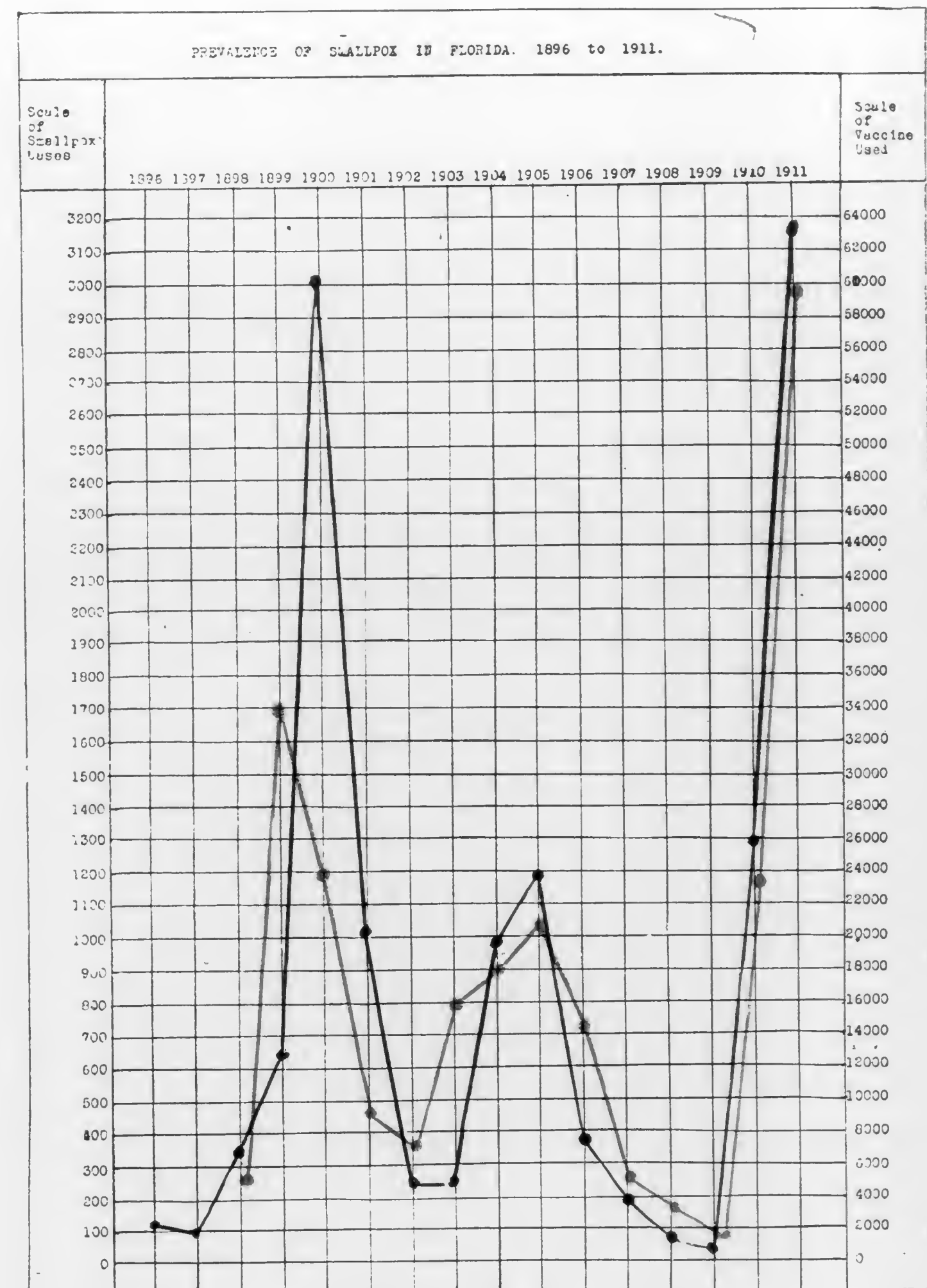
The reason for it all is easy. When the smallpox tide runs up, people get vaccinated. And that runs the smallpox tide down. People don't have smallpox when they get vaccinated. Then when the smallpox tide runs down, people stop getting vaccinated. People won't get vaccinated except in the presence of smallpox. When they don't get vaccinated, a non-immune population grows up, and soon are ready for another smallpox tide. Thus up and down it goes, up and down, up and down. Up and down for the city, up and down for the state, up and down for the nation. Up when we cease vaccinating, down when we vaccinate.



*Explanation of the Accompanying Chart:*

The green lines in chart on opposite page represent the number of cases of smallpox reported in the State Board of Health by years, from 1896 to 1911. The red lines represent the vaccinations done by years. In a general way there are about twenty vaccinations to a case of smallpox.

Please note the parallel of the two lines. Note how in 1900 smallpox mounted up to 3000 cases. Note how the same year there were 34,000 vaccinations done. Note then the rapid decline of smallpox. Then note the rapid decline of vaccination. Don't be ignorant of smallpox when it is so easy to be informed. *Then get vaccinated or not, just as you like.*



SEE EXPLANATION ON PRECEDING PAGE

*Malarial Fever and its Prevention:*

It is with much pleasure that your attention is invited to a work of immense importance, which, if continued, will be far-reaching in its benefit to the people of Florida. The Florida Medical Association, recognizing the momentous value which information respecting malaria, its distribution, as well as means necessary to prevent its spread, would be to the state, appointed a committee, of which Dr. Graham E. Henson of Crescent City is chairman, to study the subject and to present to the people in plain language useful and instructive facts in regard to a disease which has paralleled hookworm disease in invaliding a large proportion of the citizens of this state, and thereby as an economic problem, causes so much monetary loss to the commonwealth. This committee, through its chairman, Dr. Henson, has prepared and furnished the press of the state articles on malaria which, if read, should carry not only conviction to the reader, but should prove useful and instructive aids to those whose lot in life brings them face to face with this preventable disorder. These articles have been compiled, printed and distributed by the State Board of Health under publication number 84, due credit being given to the authorship. While the committee of the Florida Medical Association has not finished its efforts in this direction, yet as an organization it has not the financial means to carry the investigation to as high a degree of scientific research as the subject demands. Therefore, appreciating the importance, the help to the people, and the possible rescuing of many lives from a state of prolonged anemia and feebleness as a sequence of malarial infection, the State Health Officer submits to the consideration of yourself and the other members of the State Board of Health the advisability as well as the natural demand in health work of pushing a campaign against malaria with the same aggressiveness as had characterized the earnestness with which the fight against hookworm disease has been prosecuted. Both of these diseases are preventable and it is apparent that as the State Board of Health is charged with the preservation of the health of the citizen against sickness which may attack from without, it is also obligated to reduce and minimize similar foes which within the state's border are destroying useful lives by impoverishing mental and physical vigor. To carry on in a systematic manner a work of this kind will require an organized force of trained investigators and considerable money, but the results will justify an expenditure



which will map out the districts which produce the *Anopheles* mosquito—the malarial transmitter—and develop plans for its extermination. For this truism has long been accepted: No malarial mosquito, no malarial fever. With malarial and hookworm parasites subjugated and the people impressed with the teachings of the Board in this respect, mental and physical vigor of the people will increase proportionately. It is hoped, therefore, that the possibilities of improvement of the health of the people in this direction may so convince the Board that the suggestions herein made may have careful consideration.

*Special Report on Typhoid Fever in Tampa, 1911:*

Special attention is directed to a report of Dr. Byrd upon the prevalence of typhoid fever in Tampa. The situation there was closely studied, and all available evidence carefully considered. Dr. Byrd's conclusions were that the fly is the chief factor in the prevalence of the disease and he predicted that the high typhoid rate would of necessity continue until provision is made against the fly having easy access to open privies. That his conclusions are correct is shown by the fact that his predictions are fulfilled to the letter. The dairy that Drs. Jordans and Irons\* endeavored to fasten suspicion upon was closed for a while, and then put in a sanitary condition, but typhoid still continued, and unabated except seasonal abatement. Tampa is opening the new year with the same general conditions that prevailed last year and may confidently expect a high typhoid rate in 1912.

*Anti-Typhoid Vaccination:*

Through the courteous regard of Surgeon-General Torney of the United States Army, in donating anti-typhoid vaccine from time to time from the Army Medical Laboratory, the executive

\*In the spring of 1911 some ten of the guests of the Belleview Hotel at Belleair, developed typhoid fever, whereupon Drs. Jordan and Irons of Chicago undertook an investigation, resulting in the report that the infection came from one of the Tampa dairies. Their report is incorporated in its entirety in the report of Dr. Byrd, who arrived at diametrically opposite conclusions.

In view of the fact that all of Fisher's entire output from a herd of 68 cows (except an insignificant portion that might have reached the Belleview, even that doubtful) was distributed and consumed in Tampa; and in spite of that, the strong evidence that milk played no appreciable part in the typhoid prevalence in Tampa; and in view of the fact that Fisher's dairy was closed for a time and put in sanitary condition, and the alleged typhoid carrier dismissed; and still the fever continued; in view of all this, the correctness of Dr. Byrd's conclusions cannot for a moment be called into question.

office was enabled during the year 1911 to offer protection against typhoid fever to eighty-five persons, thus introducing the preventive, and stimulating a desire on the part of the citizens to avail themselves of a prophylaxis against a disease which by length of sickness entails much suffering, great anxiety on the part of family and friends, and an expense which oftentimes is burdensome and illy borne. While it is true that anti-typhoid vaccine may now be had from any druggist, because manufactured by the leading biological laboratories of the country, yet the cost of the product is not always within the reach of the poor or even those of moderate circumstances, and it is this class of citizenship who are to be protected against one another, in arresting such disease agencies which, if not restrained, tend to produce extended prevalence if not epidemics. It is not intended to convey the idea that the State Board of Health is designed principally to supervise or direct the health wave of the poorer classes, but because of indigency and want of financial means, certain preventive and curative means are costly and so are beyond the ability of those persons to procure, and in this way, when sick and not assisted, they become a menace to society. It is for this reason that the State Health Officer has perhaps stretched the authority vested in him in furnishing free to the indigent citizenship of the state such antitoxins and vaccines, when certified by the attending physician, as may be needful to save life or prevent further occurrence of the particular disease. This practice has been followed for diphtheria antitoxin, vaccine against smallpox, anti-rabic vaccine and tetanus antitoxin when used as a prophylactic against tetanus and administered immediately following a serious wound or injury. It is thought, therefore, that the Board should authorize a likewise free distribution of anti-typhoid vaccine, the same as is offered with the Jenner vaccine, and for this reason: experience has shown that human nature is prone to take chances, particularly where the cost in dollars and cents is a factor in determining whether the question of immunity against disease shall be entertained. As long as it was known that the executive office could supply anti-typhoid vaccine free, the applications did not lack in numbers, but when the supply obtained from the Army Medical Department was exhausted and applicants were told if the vaccine was bought from the druggist it would be applied without cost for the operation, there was a noticeable in-



difference to the protection which, when free, was eagerly sought after.

Serum-therapy is so rapidly supplanting drug medication that as has already been pointed out, it will be but a few years before the biological laboratory will have discovered and placed before the medical profession sera and vaccines by which communicable and deadly diseases not only can be prevented in their occurrence but also mitigated and rendered less harmful in their course. Thus, and then, will the homely saying that "An ounce of prevention is worth a pound of cure" be the daily slogan of the scientific practitioner of medicine.

*Prevalence of Typhoid Fever, Diphtheria, Measles and Scarlet Fever:*

The examination of disease specimens by the several laboratories furnishes somewhat of an index of some of the communicable diseases. This is true especially of malaria, typhoid, diphtheria and tuberculosis, but to only a partial degree are these facts of any real value, because there are so many cases of each of these disorders that are not known of and not reported, neither are all blood smears and throat swabs sent to the laboratories for examination.

Information to the executive office for the year 1911 respecting the communicable diseases, places typhoid fever at 610 cases, and diphtheria 220 cases. For measles and scarlet fever the reports have been only spasmodic and meagre, and for the reason already given—the mildness of seizures and the unrecognized cases. For diphtheria, typhoid fever and malaria, the chief dependence for information has been the laboratories, because cases occurring in the state can then be checked against by the laboratory findings.

In either and all of these there has been no extended prevalence nor has the usual serenity of the people been disturbed or confidence in the state health authorities been shaken.

*Anterior Poliomyelitis:*

Although opinions among some health authorities seem to be that anterior poliomyelitis is a highly contagious and infectious disorder, and should be placed in the list of restricted diseases (the word "restricted" is used because of the dislike of the term "quarantine," which really means nothing in the way of prevention), yet

it has not been the experience in Florida that this disease is of such an intensely communicable type as the writers in the northern sections of the country think that it is. Very frequently, more frequently than otherwise, cases of anterior poliomyelitis have occurred in households in this state having other children and only one child out of a large number in the family would be attacked. One or two outbreaks have been investigated in the state with this result, and the fact is not established that even the cases occurring in different localities had any connection whatsoever with each other, and as no precautions were taken to keep the well children from the sick, it is evident the contagious character of the disease is very low, else other child members of the same family would have contracted it from the sick one.

A tabulation of the cases reported in Florida in 1911 is as follows:

ANTERIOR POLIOMYELITIS IN FLORIDA, 1911

County	No. of Cases	No. of Deaths
Bradford .....	2	..
Escambia .....	10	..
Madison .....	2	..
Osceola .....	1	1
Putnam .....	1	..
Volusia .....	2	..
Walton .....	13	..
	31	1

*Leprosy:*

There is strong reason to believe that leprosy is also not as highly communicable as it has been supposed to be in the past. Experience with this disease has taught that the contagious principle is also very low, and that the prevalence of leprosy in a community need not occasion any more alarm and not so much as tuberculosis or syphilis, for lepers carry on their countenances the sign of the disease and can be avoided, but the others mentioned, more frequently than otherwise, can successfully hide their trouble to the oftentimes injury of the public, as in the case of syphilis in its various forms.

The Health Department of New York takes no cognizance of leprosy, and it has been a mooted question for many years by English observers whether the disease is as contagious or as communicable to the human family as has been generally supposed.

The fact that leprosy—generally speaking—is on the decrease should create a feeling of sympathy and not cruel and inhuman brutality, such as was shown not a few years ago in the highly civilized states of Pennsylvania and Maryland towards George Rossett, the unfortunate Syrian.

In Cuba there are probably some six hundred cases, but leprosy is on the decrease in that island. The opinion generally held there is that the leper herself or himself is the source of contagion, but farther than that or how the disease is passed from person to person is not known. In Hawaii and the Philippines the disease is on the decrease, probably, as in Cuba, owing to segregation of the infected. In Europe some few hundred years ago leprosy was very prevalent, but now only slightly so.

How or why these facts no one knows, or at best it is only a matter of conjecture. The hysteria which follows the announcement of a case of leprosy is therefore to be deplored and advised against, although abandoning all cautionary measures is not recommended nor would they be permitted when brought to the notice of the executive officer.

It is believed to be a maxim of the old English law that "a man's house and home is his castle," and, therefore, if lepers are forbidden to appear on the public streets, in public thoroughfares and public vehicles of travel, the public health in this regard has been duly and perfectly safeguarded, and it only remains for the family to protect each member by proper segregation of the sick, withdrawing them from public gaze and comment and an idle, prying curiosity into personal and private affairs.

Only two cases of leprosy have been reported in the state during 1911, one in Monroe county and one in Hillsborough county, and the executive office has no knowledge of any other existing cases.

#### *Pellagra:*

It is to be regretted that not more is known about the cause of pellagra. The disease has been widely talked of both by medical men and the magazine writer, and various theories have been put forth as to what produces pellagra, none of which have stood the test of prolonged investigation. Each has its advocates who seemingly are convinced that they are on the right track, but to the conservative health officer, nothing has yet been said or written that will give even a hint as to preventive measures of control. Pellagra

is not believed by this office to be contagious and therefore no measures of isolation have been recommended.

The number of cases which have been reported in Florida during 1911, or coming to the knowledge of the executive office, has been eighty-six, as shown in the following tabulation:

PELLAGRA IN FLORIDA, 1911			
County	No. of Cases	No. of Deaths	Remarks
Alachua .....	4	4	Only deaths reported
Bradford .....	6	1	
Citrus .....	1	..	
Dade .....	12	2	
DeSoto .....	8	2	
Duval .....	9	9	Only deaths reported
Escambia .....	16	8	
Hernando .....	2	..	
Hillsboro .....	1	..	
Holmes .....	2	1	
Jackson .....	4	..	
Lake .....	2	..	
Madison .....	4	..	
Marion .....	7	3	
Orange .....	1	..	
Osceola .....	1	..	
Putnam .....	2	..	
Volusia .....	3	2	
Washington .....	1	1	
	86	33	

#### *Hookworm Disease:*

The hookworm work of the state has assumed a steadier tone. It is less spasmodic in character than formerly and this in spite of the fact that a large portion of the efforts of the Board have been partially withdrawn from the hookworm crusade to prosecute a vigorous campaign against smallpox. It is true that where the two could be combined it has been done, but much of the smallpox has been so located that it was not possible to combine that work with hookworm work to any advantage.

About 3500 laboratory examinations were made during the year for hookworm disease, which is something like 2700 less than in 1910. This would seem to indicate that less hookworm work is being done but such is not the case. More was done in 1911 than has ever been done before. The aggressive campaign against hookworm disease in the state, now covering several years, has done its work. All physicians in the state are recognizing the disease and are treating it and, in fact, it might be safely asserted that there



are few mothers who do not, when occasion arises, suspect the presence of hookworm disease in their children and ask medical aid.

That the number of cases treated has increased is shown by the fact that the number of cases treated at the expense of the State Board of Health has increased about twenty-five per cent; that fewer laboratory examinations are being made now than formerly simply means that the physicians are depending more upon themselves than upon the laboratory. Many cases are diagnosed simply from clinical manifestations and treated accordingly, and many physicians use their own microscope. It is the purpose of the Board to continue the work, varying it as experience indicates. While only 750 cases were treated at the expense of the Board during 1911, it is pleasing to know that no child is too poor to get treatment for the asking.

The people have been informed and are kept informed by the Board of the destructive influence of this parasite and the wonderful recoveries to health and vigor which have followed a systematic treatment. They are daily presented with living pictures which must carry conviction more certain than any talk or treatise on the subject. After all is said or written, it must be educational measures and a "line upon line" teaching that will finally triumph. Some people learn through reading, some by accepting what is told—through confidence in the speaker—but the large majority of the people are convinced only by visual results.

DISTRIBUTION OF CASES OF HOOKWORM DISEASE, 1911 SERIES, TREATED AT THE  
EXPENSE OF THE STATE BOARD OF HEALTH

County	Number of Physicians	No. Cases treated	Number of towns
Alachua -----	1	4	1
Calhoun -----	1	179	15
Citrus -----	1	28	3
Columbia -----	1	2	1
DeSoto -----	4	23	6
Duval -----	1	37	3
Escambia -----	2	10	2
Hillsboro -----	2	30	7
Holmes -----	1	6	1
Jackson -----	3	100	12
Jefferson -----	2	38	2
Lafayette -----	1	14	6
Lee -----	1	3	1
Leon -----	1	20	4 (a)
Madison -----	(b)	1	1
Manatee -----	2	66	7
Marion -----	1	1	1
Orange -----	3	26	8
Pasco -----	1	7	2
Polk -----	6	67	12
Putnam -----	1	6	5
Suwannee -----	3	27	4
Volusia -----	2	5	3
Walton -----	1	39	3
Washington -----	(c)	9	2
25 Counties -----	42	748	112

(a) 4 cases were from Georgia.

(b) Treated in Jefferson County.

(c) Treated in Walton County.



RESULTS OF TREATMENT OF CASES OF HOOKWORM DISEASE, 1910 AND 1911 SERIES,  
TREATED AT THE EXPENSE OF THE STATE BOARD OF HEALTH

	1910 (d) Series	Per cent. of entire Series	1911 Series	Per cent of 1911 Series	1910-1911 Series	Per cent. of entire 1910-1911 Series
Number of Cases Cured—						
With 1 course of thymol.....	102	16.94	209	27.94	311	23.03
With 2 courses of thymol.....	98	16.22	80	10.69	178	13.18
With 3 courses of thymol.....	209	34.71	203	27.13	412	30.51
With 4 courses of thymol.....	14	2.32	25	3.34	39	2.88
With 5 courses of thymol.....	6	.99	25	3.34	31	2.29
With 6 courses of thymol.....	1	.16	8	1.07	9	.66
With 7 courses of thymol.....	1	.16	7	.93	8	.59
With 8 courses of thymol.....			1	.14	1	.07
With 9 courses of thymol.....	1	.16	1	.14	2	.14
With 11 courses of thymol.....			1	.14	1	.07
With 12 courses of thymol.....			1	.14	1	.07
	432	71.76	561	75.00	993	73.59
Number of Cases Infected—						
After 3 courses of thymol.....	156	25.91	154	20.58	310	22.96
After 4 courses of thymol.....	10	1.66	20	2.67	30	2.22
After 5 courses of thymol.....	2	.33	6	.80	8	.59
After 6 courses of thymol.....	1	.17	5	.67	6	.43
After 7 courses of thymol.....	1	.17	1	.14	2	.14
After 24 courses of thymol (e)			1	.14	1	.07
Totals.....	602	100	748	100	1350	100

(d) From 22nd Annual Report of the State Board of Health of Florida, 1910, pp. 33.

(e) Also given three courses of beta-naphthol.

MICROSCOPICAL EXAMINATIONS FOR ANIMAL PARASITES MADE AT THE THREE BACTERIOLOGICAL LABORATORIES OF THE STATE BOARD OF HEALTH DURING 1911

Parasite	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Hookworms:													
Positive .....	211	172	215	289	299	277	331	278	232	278	180	200	2962
Negative .....	199	196	192	271	230	234	273	205	211	220	224	200	2655
Unfit or doubtful.....	1	2	--	1	7	--	--	--	1	--	--	--	12
Totals .....	411	370	407	561	536	511	604	483	444	498	404	400	5629
Amoeba coli:													
Positive .....	3	4	5	--	1	6	--	1	1	2	1	3	27
Negative .....	--	--	1	1	1	2	1	--	--	1	4	4	15
Ascaris lumbricoides:													
Positive .....	2	4	7	3	1	12	7	4	8	7	4	7	66
Lambliia intestinalis:													
Positive .....	--	1	--	--	--	--	--	3	--	--	--	3	7
Oxyuris vermicularis:													
Positive .....	--	--	--	1	1	--	1	--	--	--	--	1	4
Strongyloides intestinalis:													
Positive .....	1	--	2	--	--	--	--	--	--	--	4	--	7
Tapeworms:													
Positive .....	3	8	3	4	5	2	4	5	--	3	5	8	50
Negative .....	--	--	--	--	--	--	--	--	--	--	1	--	1
Tricocephalus dispar:													
Positive .....	5	5	9	5	15	6	4	6	14	9	5	4	87
Trichomonos vaginalis:													
Positive .....	--	--	--	--	1	--	--	--	--	--	--	--	1
Unidentified eggs .....													
Totals .....	14	22	27	14	25	29	17	19	23	22	24	30	266
Hookworm examinations.....	--	--	--	--	--	--	--	--	--	--	--	--	5629
Total examinations .....	--	--	--	--	--	--	--	--	--	--	--	--	5895

## HYDROPHOBIA

The "mad dog" incident in the state for the past year has occasioned deep concern to the executive office, both on account of the seriousness of the situation as well as the cost of preventive measures which in the way of serum administration is necessary to escape the horrible agony of a death from hydrophobia.

The state statutes would seem to impose upon the State Health Officer the duty of preventing both a spread as well as an introduction of hydrophobia in the state of Florida, but when rabid animals became numerous in Duval county during the past summer, and when some action on the part of the State Health Officer seemed demanded, and to longer put off radical measures, such as muzzling all dogs running loose or destroying roaming animals.

to suppress the disease, would be a failure to perform an important duty, the State Health Officer was confronted with this fact: that he would have to describe by metes and bounds the infected territory in any orders to be given the sheriff, as the statute prescribes, to be legally effective, a condition which he found it was then impossible and impracticable to meet or reasonably or rationally carry into effect. And here a pause is made, to say that unless certain discretionary authority is vested in the State Health Officer to manage or control many disease conditions arising in the state from time to time, which could not have been anticipated or thought of by the legislature or made mention of specifically when the statute providing for the control of communicable diseases was framed and passed, the very purpose of health government and sanitary supervision in Florida will be considerably embarrassed, if not altogether defeated.

In caring for persons—citizens of the state—who are indigent and who have been bitten by rabid animals, the State Board of Health has offered gratuitously the Pasteur treatment to those financially unable to purchase this vaccine—a method of immunization gradually produced—by which the virus of rabies can be destroyed and the patient saved from horrible agony and death from hydrophobia. Some doubt has been expressed as to the legal authority of the Board to expend funds in the control or management of any disease not especially provided for or mentioned by legislative enactment; but here again arises a question of great moment to the state and her citizenship: whether the executive officer shall sit quietly by, know of, and perhaps see, conditions existing which threaten both the health and peace and comfort of the citizens, and do nothing, because the state statutes dealing with health matters do not particularly state and lay down a rule of action for every exigency which may arise, or whether he shall assume such authority, trusting to the approval of the Board or the courts should such action be questioned. The people must decide this important matter, for after all it is but the expression and wishes of the people which are concentered into laws. To wait for specific statutory authority has a parallel in the oft-cited incident where the man on the dock would offer no assistance to the man in the water likely to be drowned, because he had not been formally presented and introduced to the unfortunate about to lose his life; and the State Health Officer demurs to a strict observance of the letter of the

law and ignoring or lightly considering the spirit of the exigency or exigencies, for it seems to him that the spirit of the law should be made the magnetic needle in directing sanitary assistance to the people of Florida.

From correspondence and from interviews there can be no doubt of this fact: the people of Florida, reposing confidence in the organization which by constitutional enactment they have created, suppose that their health and all that pertains to it is placed in the hands of the State Board of Health to manage and direct, and when reasonable requests looking to that end are met by answers of lack of statutory authority, dissatisfaction is naturally expressed toward a system whereby seemingly indispensable measures are held up or refused because of absence of or ill-defined wording of the statute.

#### *Deaths from Hydrophobia:*

During 1911 four deaths from hydrophobia, in humans, were reported to the State Board of Health. The case records are of value and two facts are established beyond the shadow of a doubt by these instances and when it is remembered that 66 other persons bitten by animals demonstrated to have been rabid, either by clinical manifestations or by microscopic examination, or both, and that 48 other persons exposed to animals supposedly rabid, were all successfully treated with anti-rabic vaccine to prevent the development of rabies: that is, that there is a disease, hydrophobia, which may affect the human as well as the lower animals; and, second, the prompt administration of anti-rabic vaccine after a person has been exposed to rabies, will, in most cases, prevent a development of the disease.

#### *Case Records:*

Case No. 1, male, white, age 83, residence Otter Creek, Levy county, Florida. Bitten January 6, 1911, by dog. Dog killed and brain sent to laboratory of the State Board of Health at Jacksonville. Examination unsatisfactory, and physician submitting head for examination so informed. Animal inoculation made at laboratory, but after three months the three animals inoculated had shown no symptoms of rabies.



On March 17th, p. m., patient, as stated by the attending physician, Dr. J. W. Turner, was

"taken with a difficulty of swallowing and it soon developed into spasms of the pharyngeal region and glottis, every time he attempted to swallow or put anything about his head or face. Within 12 hours from the time these symptoms developed, he was delirious, restless and could not swallow. His movements were almost continuous; would lie down and get up, walk the floor, sit on a chair, go out of the room and back, all over the same thing. When he would doze off with slumber, he would lose his breath and wake right up. He would beg for water and wish that he knew how he could get it inside him without swallowing it. The last 18 hours he lived he was perfectly insane but never had a convulsion. He died about sixty hours (Monday, March 20th) after exhaustion. He never had an elevation of temperature."

Of eight children also bitten by the same dog, three were given the Pasteur treatment with no untoward development.

Case No. 2, C. L., male, white, age 32, residence Jacksonville, Duval county, Florida. On March 22nd, 1911, was bitten by his pet dog on the nose, near the left eye, an upper incision being close to the supraorbital foramen, and possibly close to a cranial nerve. The animal inflicting the wounds not only gave clinical evidence of hydrophobia, but the Negri bodies were demonstrated by the microscope. Patient was advised to have the Pasteur treatment administered, and consented several hours afterward to do so. Anti-rabic vaccine was thereupon ordered by telegraph from Marietta, Pa. The first three doses, as usual, were administered on March 25th. The subsequent history of the case is given as follows in a letter from Dr. Frederick Bowen, the attending physician:

"April 11, 1911.

"State Health Officer,  
City.

Sir:

I regret to report the case of C. L., who was bitten by a dog on March 22nd, has terminated fatally. The man began treatment March 25th, receiving his first dose of vaccine on that date.....

The man proceeded for the first seven days without symptoms. The 8th, 9th and 10th doses produced marked induration, which subsided about three days later.

On April 6th the patient complained of general drowsiness, telling me that he had fallen asleep in his buggy once. On Friday (7th) he complained of the same with the addition of pain in his head, which he said radiated from the top of his head over the location of the wound received from the dog. The wound had entirely healed over by the ninth day.

Treatment was continued until Sunday when symptoms of pain in the throat, headache, dryness of the throat and fear of cold liquids induced me to stop treatment.

On Monday morning, in company with Dr. Hiram Byrd, Assistant State Health Officer, I went to the residence of the patient, and found him suffering from great nervousness, pain in the head, spasmodic contraction of the

throat, inability to swallow cold liquids, convulsive seizures and inability to sleep.

I ordered morphine in the amounts of one-half to one grain to be repeated at frequent intervals until quiet. At the end of twenty-four hours he had taken twenty grains of morphine hypodermatically, twenty-four grains of sodium bromide and about one-half ounce of chloral hydrate by rectum, but these sedatives had produced only short intervals of sleep, but with little or no relief from the convulsive seizures.

The man's condition became steadily worse, until Tuesday, April 11, when general paralysis set in and the patient died."

It may be said in explanation for the sudden termination of this case that the virus which entered through the wound produced by the animal which bit him was extremely virulent and progressed faster than the preventive treatment could retard. The City Health Officer of Jacksonville, as well as the attaches of the executive office and the Jacksonville laboratory, have several times during the year remarked upon the seeming extreme virulence of the type of rabies prevailing in Duval county.

Case No. 3. The history of this case, as follows, is abstracted from "Rabies in a Human Being, with Post Mortem," by Henry Hanson, A. B., M. D., Senior Bacteriologist, State Board of Health Laboratories of Florida, Jacksonville, Florida, published in the Journal of the American Medical Association, December 23, 1911, vol. lvii, pp. 2064-2068. Dr. R. L. May of Jacksonville was the attending physician in the case.

*Patient.*—March 12, 1911, Dr. May was called to see a boy with severe throat symptoms and inability to swallow. It was at first thought that possibly this might be due to some of the commoner throat affections, probably diphtheria. On examination of the throat, however, nothing definite was revealed and the forcible depression of the tongue during the examination seemed temporarily to enable the patient to swallow a bit of medicine which the doctor administered. When the boy tried to drink some water it was forcibly expelled through the nose and mouth and a general convulsion was noted. Aside from this the patient's condition did not seem very serious and the doctor left, stating that he would call again.

*History.*—A few hours after leaving the patient, Dr. May received a hurry call and on return found the patient very much worse. The boy was more nervous, the respiration was interfered with, and the muscles of deglutition were paralyzed. This aroused the doctor's suspicion and he began to inquire about the possibility of the boy's having been bitten by a dog, and learned that some three weeks previous a stray dog had made its appearance about the premises and the boy had captured it, intending to keep it as a pet. The dog seemed somewhat vicious at times and, when the boy was tying it up, bit him severely on the calves of both legs. The father, in attempting to help the boy tie the dog up, was bitten on the wrist but not very severely. Two other children\* were also bitten by the same dog but so far nothing had come of it. Shortly after this the dog escaped and nothing further was known of it. Three

\*The father and one of the children were afterward given the Pasteur treatment, commencing March 20th, with no untoward developments.



days before Dr. May called, the child went to bed without supper, complaining that he did not feel well. The following day the conditions seemed to be the same and he refused food and drink of all sorts with the exception of a small quantity of milk. In drinking the milk the child complained of feeling coffee-grounds in it, and the family, in order to humor the boy, obtained a tube for him that he might see there was nothing of that nature in the milk.

*Course.*—As the disease progressed he seemed to grow thirsty and would ask for water, but when it was brought to him he would strike the glass out of the hands of those bringing it, or would jump out of the bed in various directions, as though he were frightened and trying to escape. The child ate nothing from the onset of the illness, on a Sunday evening, until the time of his death, which occurred late Wednesday afternoon of the same week. In order to determine definitely the cause of death, permission for autopsy was obtained.

#### AUTOPSY

*External Macroscopic Examination.*—The body was that of a poorly nourished male child, 9 years old, symmetrical in outline, development fair, no deformities. Conjunctivae and mucous membranes were very pale. Eyes were sunken and rolled upwards, pupils dilated to about 6 mm. in diameter; rigor mortis was present throughout, most pronounced in upper extremities, especially the jaw. There was no oozing from mouth or nose; teeth were irregular; mouth could not be opened; both sides of the face presented marked swelling, which extended uniformly down the neck to the upper part of the chest; on palpation this swelling crackled, showing the condition to be one of emphysema extending down as far as the nipples on the chest and as far as the elbows on the arms. No especial redness was connected with this, such as one would expect in a swelling of an acute inflammatory nature. Dependent parts showed hypostatic congestion. Genitalia were normal. There was no edema of extremities.

*Internal Macroscopic Examination.*—Abdomen: Subcutaneous fat was scanty. The serous surfaces were smooth, moist and glistening, and there was no increase in the peritoneal fluid. The intestines were slightly distended with gas but appeared to contain a diminished amount of fecal mater. In places intestines showed darkened areas as of hemorrhage in the mucosa. On opening the small intestines a large worm of the type *Ascaris lumbricoides* was found; a smaller worm of the same type was also found in the stomach. The intestinal mucosa showed marked hyperemia which in places amounted to oozing hemorrhages, Peyer's patches showing the most marked injection. The other abdominal organs, on superficial inspection, presented no marked lesions. Time did not allow as careful an examination as would be desired here. The bladder was partly distended with urine.

*Thorax:* The mediastinal tissues were congested and markedly emphysematous, showing large blebs throughout. The lungs were emphysematous, cyanotic, congested and edematous. The chest was free from adhesions. The pleural fluid was not markedly increased. The heart showed no abnormality.

*Head:* A bulging of the meninges was found when the skull was opened. The meninges were redder than normal and the blood-vessels of the brain were congested. The brain substance was edematous, and one section showed small punctate hemorrhagic areas. A viscid exudate was noted on the mesencephalon, dorsally. It seemed that the general appearance of the brain was of a rather viscid quality, though not very marked.

At times it seems that there is a peculiarity about the appearance of the brains of animals in which we find Negri bodies within the nerve-cells. The gross findings in general are very indefinite and

negative. The intestinal tract is, as a rule, empty on account of the animal's inability to swallow. In a certain number of cases a number of foreign substances, such as pieces of wood, stones, etc., are found and considered characteristic. The microscopic examination, however, is characteristic and diagnostic.

*Microscopic Examination.*—In this autopsy we took pieces of Ammon's horn, cerebrum, cerebellum and midbrain. From each of these we made smears, according to the custom of this laboratory. The smears were stained by the Anna Williams method, as follows: Smears are fixed in neutralized methyl alcohol for ten seconds, and then stained in a mixture of acid fuchsin and methylene-blue. (Methyl alcohol 500 c. c., sod. bicarb. 0.25 gm., picric acid 0.397 gm., the fixative. Saturated alcoholic methylene-blue 5 drops, saturated fuchsin 1 drop in 10 c.c. of distilled water, constitutes the stain. Slides are flooded with stain as they are in staining for tubercle bacilli and heated to steaming for a few seconds to one minute, washed in tap water, dried and examined in oil).

In all the smears examined we found Negri bodies, many of which were outside of the cell, but definite numbers were also found within the protoplasm of the large ganglion cells, in one of which my assistant, Dr. Mills, counted six definite, typical Negri bodies. Other pieces of brain tissue were hardened in Zenker solution, sectioned and stained with hematoxylin and eosin. In the sections from the hippocampus, Negri bodies were found within the ganglion cells. In this stain they are eosin-staining with small vacuole-like formations in place of the "inner bodies" which stand out like granules or nuclear structures in the Anna Williams stain.

In addition we inoculated three rabbits, two subdurally, and one intravenously in the lateral veins of the ear. One of the rabbits died from the operation (subdural), but the other two survived the operation and died with typical rabies on the nineteenth and twenty-third days, the rabbit with the intravenous inoculation dying on the twenty-third day after inoculation. The brains of each of these rabbits showed Negri bodies in smears from Ammon's horn.

From the negative nature of the gross morbid anatomy, from the finding of Negri bodies in the ganglion cells in Ammon's horn and the reproduction of the disease by inoculating an emulsion in two rabbits which later died with symptoms of rabies (their brains again showing typical Negri bodies), we have a right to conclude that we were dealing with a case of rabies in a human being. This has been further borne out by the fact that a number of animals which were inoculated with brain-emulsion of animals, in which no Negri bodies were found, have continued well for a number of months. Other animals were inoculated with negative brains at the same time that the above inoculations were made and are well and show no symptoms at the present writing. Other positive brains were inoculated into rabbits subdurally. Intramuscular inoculations



deep into the muscles of two guinea-pigs were made of an emulsion of the brain of a rabid dog, which inoculations resulted in death from rabies on the fourteenth and seventeenth days respectively, after inoculation. The brains of each guinea-pig showed Negri bodies. The dog whose brain was used in these inoculations was one of especial interest to the local health authorities, because the owner of the dog and a friend of his, who was a dog trainer, declared that the dog did not have rabies. The dog, however, died of rabies and showed the presence of Negri bodies in the ganglion cells of the hippocampus and, as before stated, the inoculation of his brain emulsion reproduced the disease in two guinea-pigs. The owner of this dog had been bitten by a bitch, a sister of the dog in question, and he\* died with typical rabies in spite of the fact that he had had nineteen anti-rabies inoculations.

Case No. 4, B. T. T., male, negro, age 11, residence Jacksonville, Duval county, Florida. Died Nov. 30, 1911, from symptoms resembling hydrophobia. Some six or eight weeks prior to death, a stray dog attacked the boy's pet puppy, and the boy, in defending his pet, was bitten by the stray animal. Further history of either dog unobtainable. This information has been furnished by Dr. H. W. James (colored) of Jacksonville, the physician in attendance upon the case.

*Modification of the Plan of Furnishing the Pasteur Treatment:*

The State Board of Health of Florida, in its efforts to prevent the occurrence and spread of communicable diseases, has made it a part of the policy of the Board to make possible the proper treatment of dangerous infectious diseases where the cost to the patient would usually be prohibitive, or where it is a difficult matter for the practicing physician to easily obtain the means of prevention made necessary by such diseases. In these instances the Board has usually been successful in arranging for furnishing and paying the costs of such treatment. Whenever it becomes a comparatively simple matter, however, for the physician or patient to procure or pay for this class of preventive medicine, it is not believed to be obligatory upon the Board to longer continue such a plan.

The State Board of Health, therefore, announced on April 13th, 1911, through the various newspapers of the state, and through circular letters to all the physicians of the state, that it had made

\*Case No. 2, page 34, this series of deaths.

a modification in its plan for furnishing the anti-rabic vaccine for the prevention of rabies in the human: that thereafter those persons who are financially able will be expected to pay for the cost of the vaccine. The Board, when requested, continues to order the treatment as in the past for the physicians of the state, but in those instances where the patient is able to pay the cost of the vaccine, the physician is to guarantee the account, and the price of the vaccine should accompany each order for treatment.

Those persons who are bitten by rabid animals and who are financially unable to pay for the treatment will be furnished with treatment by the Board, through their physician, free of cost, but the physician is to furnish this office with the certificates of himself and of the patient or patient's parent or guardian (form No. 209), that the patient is not pecuniarily able to purchase or pay for such anti-rabic vaccine and that no person upon whom the patient is legally dependent, or who could be required to pay for such vaccine, is financially able to pay for the same.

The treatment is still administered at home by the patient's physician, as has been the method for four years, and the physician is entitled, in all cases, to receive from the patient the regular fees for his services in administering the vaccine.

During the year 1911 treatment was furnished for twenty-four patients who paid the cost of the vaccine, and for ninety-one patients, the state paying for the vaccine.

Form 209, the certificates of indigency referred to above, is as follows:

Florida  
State Board of Health  
Form 209.

STATE BOARD OF HEALTH OF FLORIDA

Anti-rabic Vaccine

Certificate of Attending Physician:

State of Florida,  
County of.....

..... Fla.,.....191.....  
I hereby certify that I am a physician licensed to practice under the laws of the State of Florida, and residing at.....in said State and County; that....., a patient under my professional charge, has been bitten by a rabid ....., the data concerning which is furnished on form 161, Record of Pasteur Treatment; and that I administered to said patient the anti-rabic vaccine furnished by the State Board of Health of Florida; that in my professional opinion and to the best of my knowledge, the administration of said vaccine was necessary to prevent the development of rabies in said patient; that I have investigated the condition and finances of

said patient, in order to determine whether.....is able to pay for the said vaccine, and that from such investigation, it is my best information, knowledge and belief that said patient or parents are not pecuniarily able to purchase or pay for said vaccine, and that no person upon whom.....is legally dependent or who could be required to pay for such vaccine is financially able to pay for the same.

I further certify that in my opinion, from an investigation of all the facts in this case, it is proper for the State Board of Health of Florida to pay for the cost of such anti-rabic vaccine.

.....  
Attending Physician.

Certificate of Patient or Parent:

State of Florida,  
County of.....

.....Fla.,.....191.....  
I hereby certify that I am financially unable to purchase or pay for the anti-rabic vaccine which was administered to me by the advice and at the instance of Dr....., and which was furnished by the State Board of Health, and that there is no person upon whom I am legally dependent or who could be required to pay for said vaccine who is financially able to pay for the same; that said vaccine was administered to me at the instance and by the advice of the said Dr..... after I was bitten by a ....., declared to be rabid; and I further certify that I have made this affidavit for the purpose of inducing and procuring the State Board of Health to pay for the vaccine administered to me as aforesaid, and that all of the facts herein stated are true.

.....  
Patient.

Per.....  
Parent.

## POLICIES IN THE MANAGEMENT OF COMMUNICABLE DISEASES

With an ever-changing knowledge and ever-accumulating experience, it sometimes becomes necessary to change policies in the management of communicable diseases, and to base the policies of the Board on practical and tried-out methods rather than on theoretical conclusions. For instance, with the advent of our knowledge that yellow fever is transmitted by mosquitoes, it was necessary to rearrange the entire scheme of management in accordance with that fact. Some of our information is based upon bacteriological investigation and some upon epidemiological studies, for very often the conclusions arrived at by bacteriological study and by epidemiological study greatly vary. For example, Dr. Flexner and others have found in the nose of a child suffering from infantile paralysis something which, when injected into a monkey, will produce symptoms of that disease, thus bacteriologically indicating that the disease is transmitted by nasal secretions and that it is transmissible. On the other hand, Lebrede and Recio\* of Cuba studied 140 cases of infantile paralysis in the province of Santa Clara, Cuba, and in no instance did they find more than a single case in a family, notwithstanding the fact that the Cubans for the most part generally have large families and, further, notwithstanding the fact that no attempt was made to limit communication between the sick and the well. Similarly in the state of Washington 397 cases were studied by Kelly, Gellhorn and Manning,\*\* and in only eight instances was it found that two cases occurred in a family, and in no instance more than two.

These observations are in keeping with the observations generally made upon the occurrence of the disease in Florida.

It is the policy of some boards of health to base management upon laboratory findings, and thus it happens that in New York City infantile paralysis is quarantined for a period of six weeks. In other boards it is the policy to give a little more weight to epi-

\*Lebrede, Dr. Mario G. and Recio, Dr. Alberto, Acute anterior poliomyelitis, Cuban epidemic of 1909. In *Sanidad y Beneficencia*, Havana, Cuba, April, 1910, vol. iv (4), pp. 328-357.

\*\*Report of Infantile Paralysis in the State of Washington during 1910, by Eugene R. Kelley, M. D., Assistant State Health Commissioner; Walter Gellhorn, M. D., and John B. Manning, M. D. pp. 69. Olympia, Wash. 1911.



demiological findings, particularly when they do not coincide with bacteriological findings, and this is the position assumed by this office, for, notwithstanding the bacteriological findings to the contrary, it would seem to the State Health Officer of Florida that he would be hardly justified in throwing any restrictions around the sufferer from infantile paralysis, especially since it is a rule of the disease, to which there have been but few exceptions, that but only one person in a family had suffered from it.

It might be added that there is a growing unrest as to whether land quarantine is ever justifiable. It has certainly never justified itself as applied to measles or whooping cough, and has consequently been abolished almost everywhere where it has been instituted, with indifferent results as to whether quarantine is or is not maintained. The same thing is true of smallpox, particularly in the Southern United States where the disease often manifests itself in such mild form, and it might be said rarely manifests itself except in mild forms; and this is equally true of scarlet fever. On account of the very mildness of these diseases a great many, frequently the majority of the cases, are entirely overlooked, and no quarantine restrictions whatsoever thrown around them, and it is just such cases that keep the disease spreading regardless of quarantine.

In other words, it is exceedingly problematical whether quarantining one-fourth to one-half of the cases of a disease (those cases which are reported to boards of health) and leaving the other three-fourths to one-half (mild, unrecognized cases) going unhampered and without any restrictions whatsoever, is justifiable, for it is doubtful if such quarantine restrictions have any restraining influence upon the spread of the disease.

## COMMON NUISANCES

In the ordinary acceptance of the terms, there are two kinds of nuisances: common nuisances, which are nuisances that do not make people sick; and sanitary nuisances, which are nuisances that do make people sick.

Unfortunately the statutes are a little confusing on these terms, but the Board has adhered to the advice of the attorney and confined its activities to sanitary nuisances, or those things that actually affect the public health.

Common nuisances do not make people sick. They may be annoying in the extreme, but unless they actually affect the health of people they are not construed as sanitary nuisances, and do not come within the jurisdiction of the State Board of Health. For example, a glue factory gives rise to very foul smelling odors, but it does not make people sick. It does not cause smallpox, or typhoid fever, or yellow fever, or any disease in the whole catalog, however ill it may smell. People live as long, and enjoy as good health, working in a glue factory, or in a guano factory, as in a cologne factory.

A common nuisance can be abated, however, under the Common Nuisance Act, Section 3680 of the General Statutes, 1906, which reads as follows:

3680. (Nuisances.) Indictment and removal.—All nuisances which tend to annoy the community or injure the health of the citizens in general, or to corrupt the public morals, shall be indictable and punishable by a fine not exceeding two hundred dollars, at the discretion of the court; and any nuisance which tends to the immediate annoyance of the citizens in general, or is manifestly injurious to the public health and safety, or tends greatly to corrupt the manners and morals of the people, may be removed and suppressed by the order of the justice of the peace of the district, founded upon the verdict of twelve householders of the same, who shall be summoned, sworn and impaneled for that purpose, which order shall be directed to and executed by any sheriff or constable of the county; and an indictment shall lie for the same.

This is a fortunate separation of the actual public health work from the scavenger work of the state. Both are provided for by law, but by separate laws. In actual practice it usually falls out that the Board is appealed to first, and then in cases of common nuisances complainants are referred to appropriate statutes under which common nuisances are abated, reserving its own activities for sanitary nuisances proper.

It might be added that many of the complaints partake more of the nature of personal disagreements than anything else, and in such cases the Board is called upon to pull some one's chestnuts out of the fire. People go so far as to write letters of complaint asking that their names be not mentioned, and even in some instances withhold their name entirely from the letter. Sometimes it is a matter of property values. For example, a certain man bought a tract very cheap because it was in the vicinity of where municipal garbage was disposed of. He then undertook to use the State Board of Health to get the municipal garbage disposed of elsewhere in order that his property value might increase. It is needless to say that it has been the policy of the Board to keep out of such squabbles, and that where the public health has not been directly concerned, it has held strictly aloof.

## 1911 MEETING OF THE STATE BOARD OF HEALTH

During 1911 the State Board of Health was in session but once, the annual meeting, which was held on February 14th, 1911, in accordance with the statutes. An abstract of the transactions is as follows:

### *Regular Annual Meeting:*

On Tuesday, February 14th, 1911, at 3:30 p. m., the State Board of Health of Florida met in annual session at the executive offices of the Board, Dyal-Upchurch Building, Jacksonville, Florida. Present: Hon. E. M. Hendry, president; Hon. John G. Christopher and Dr. H. L. Simpson, members of the Board; Dr. Joseph Y. Porter, State Health Officer; and Dr. Hiram Byrd, Assistant State Health Officer.

The minutes of the two special meetings held in 1910 were read and approved.

The Annual Report of the State Health Officer for the year 1910 was read and approved, as likewise the President's letter of transmittal, and the two documents were ordered forwarded to the Governor of the state.

The desirability of further sanitary legislation, especially as regards the addition of a Division of Sanitary Engineering, was discussed, and the State Health Officer was instructed to prepare a measure with this object in view, to be presented to the 1911 legislature.

The rules and regulations of the Board were revised, additions being made, as well as some rules being repealed, and the matter referred to the attorney of the Board for legal instructions.

Mr. Christopher, member of the Building Committee of the State Board of Health, reported that satisfactory progress was being made in filling in with sand the lot recently donated to the Board by the city of Jacksonville, on which it was contemplated that the Board would erect a building for executive offices and central laboratory; and the Board, upon the representations of the member, increased the appropriation for the building to \$40,000.



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The minutes of the two special meetings held in 1910 were read and approved.

The Annual Report of the State Health Officer for the year 1910 was read and approved, as likewise the President's letter of transmittal, and the two documents were ordered forwarded to the Governor of the state.

The desirability of further sanitary legislation, especially as regards the addition of a Division of Sanitary Engineering, was discussed, and the State Health Officer was instructed to prepare a measure with this object in view, to be presented to the 1911 legislature.

The rules and regulations of the Board were revised, additions being made, as well as some rules being repealed, and the matter referred to the attorney of the Board for legal instructions.

Mr. Christopher, member of the Building Committee of the State Board of Health, reported that satisfactory progress was being made in filling in with sand the lot recently donated to the Board by the city of Jacksonville, on which it was contemplated that the Board would erect a building for executive offices and central laboratory; and the Board, upon the representations of the member, increased the appropriation for the building to \$40,000.

The salaries of certain of the Assistant State Health Officers, and of several of the bacteriologists of the Board, of the caretaker of the Escambia County Isolation Hospital, and one of the office attaches, were increased by the Board.

This session of the Board was adjourned the afternoon of February 15th, 1911.

## THE OFFICES OF THE STATE BOARD OF HEALTH

After the special session of the legislature in 1889, called by Governor Fleming for that purpose, had enacted the original laws establishing a State Board of Health in conformity with Section XV of the 1885 constitution, and after the appointment and organization of the Board, the matter of headquarters was settled by deciding that the offices should be located in the city of Jacksonville on account of superior railway, mail and telegraph facilities.

In the spring of 1889 the executive offices of the Board were established in the Law-Exchange Building, at the corner of Market and Forsyth Streets, only one small office room being used then.

Some few years later the office was moved to the sixth floor of the Gardner Building on Bay Street between Main and Laura Streets (the first six-story building constructed in Jacksonville). The Board obtained three rooms at this time, each being about fifteen feet square. While this building was claimed to be fire-proof, which led the Board to choose offices in it, yet in the Jacksonville fire of May, 1901, the building was totally destroyed, and of all the records of the Board only the minute book was saved.

Immediately after the fire, two office rooms were secured in the Everett Building, now the Everett Hotel, at the corner of Julia and Bay Streets.

In 1902, when the Dyal-Upchurch Building was constructed, the Board obtained three rooms on the fifth floor, numbers 513-517-519, which have been occupied by the executive office since that time.

The bacteriological laboratory division of the Board was opened in 1903, and after much difficulty, through the courtesy and consideration of Dr. J. C. L'Engle, the Board was enabled to rent three rooms in the L'Engle Building, corner of Bay and Main Streets, for the use of the laboratory, and this space has since that time been devoted to the work of the central laboratory.

The quarters occupied by the branch laboratories are discussed in another place.

### *The Jacksonville Building of the State Board of Health:*

Successive legislatures have almost at every session imposed additional duties upon the State Board of Health and, with the taking up of new lines of work, it was found necessary to increase



the number of attaches of the Board; and in 1907 the quarters occupied by the executive office were found to be so cramped and congested that the matter of additional office space had to be seriously considered. In the Annual Report for 1907 (pp. 105-106), the State Health Officer says:

"During the past fall some of the warm supporters of the Board, and enthusiastic admirers of the Laboratory, set to work to establish the Laboratory and the Executive Offices of the Board permanently in Jacksonville, by offering a gift of land suitably located in the city on which an appropriate building or buildings could be erected. Dr. R. H. McGinnis of Jacksonville took the initiative in this matter, and through his persistent efforts the City Board of Health became interested in the project, and an ordinance was drawn and presented to the City Council, having the approval and hearty support of the Board of Public Works, which gives to the State Board of Health for state health purposes, a plot of land at the foot of Second street, bordering on the Boulevard, and containing about two and one-half acres. The State Board of Health, by resolution, then agreed that upon the filing of proper papers transferring the property, it would erect a building sufficiently large to accommodate not only the executive offices, but also having ample facilities for the needs of a bacteriological laboratory of modern construction \* \* \* It is hoped before another annual report is made, that the Board will be located in its new building, and that the laboratory section will be thoroughly equipped with every recent and advanced scientific facility."

The hopes of the executive officer were, however, not realized that year—and not until 1912 has it been possible to remove to a home belonging to the Board. The reasons for this delay are set forth in the 1908 Annual Report (page 18) as follows:

"The city of Jacksonville, in the early part of last year (1908), donated a valuable site in the city at the foot of Second street, bordering on the Boulevard, for erection of a suitable building by the Board for laboratory and office purposes. But there appeared to be some legal dispute as to the title, and the attorney general withheld his approval of the deed of gift from the city, greatly to the disappointment and expectation of the Board. The mayor of Jacksonville assures the Board, however, that the city authorities have in contemplation another site which it is intended shall be offered the Board for the purpose mentioned."

During the year 1909 the title to the lot of land was cleared through the efforts of the city attorney, Hon. P. H. Odom, and of the attorney of the State Board of Health, Hon. E. J. L'Engle, proper quit claim deeds being obtained from those persons who had previously had a claim upon the property. This gave the city a clear title to the property, and at a special session of the State Board of Health in Jacksonville, on December 5th, 1910, resolutions were adopted by the Board, accepting the proposition of the city of Jacksonville, as follows:

*Be it Resolved*, by the State Board of Health of the State of Florida, that this Board accept the terms and conditions of the ordinance of the city of Jacksonville known as Ordinance No. K-48, approved June 24th, 1910, and in consideration of the conveyance by said city to the State of Florida for the use of said State Board of Health of the lands described in said ordinance, this Board agrees to erect upon such lands a building and make improvements thereon worth at least twenty-five thousand (\$25,000) dollars, and thereafter to maintain and use the said lands and property for the purposes mentioned in said ordinance and for no other purpose.

At a previous meeting of the Board Hon. John G. Christopher, member, and Dr. Joseph Y. Porter, State Health Officer, had been appointed a Committee on Buildings to handle the matter of a Jacksonville Building. Immediately after the December meeting of the Board, therefore, advertisements were issued for plans and specifications of a suitable building. At the 1911 regular meeting of the Board the appropriation for the building was, with the consent of the State Comptroller, increased from \$25,000 to \$40,000.

The lot of land donated to the Board, on which the building is located, is situate on the south side of Hogan's Creek at the intersection of Julia and West Second Streets. Its size is: 337 feet on Bloxham Street, the southern boundary; 250 feet on Cedar Street, the western boundary; 450 feet along Hogan's Creek, the northern boundary; and 100 feet on Julia Street, the eastern boundary; and comprises about two and one-half acres. The public entrance to the lot is on Julia Street, as the building faces east—directly at the foot of West Second Street.

#### *The Building:*

The Building Committee of the State Board of Health during the latter part of February, 1911, accepted the bid of W. T. Hadlow Company, of Jacksonville, amounting to \$29,000, for the construction of the building. Work had been previously commenced by the committee on filling in the lot with sand.

The plans and specifications as accepted by the committee had been prepared by Messrs. Robinson & Reidy, Architects, then of St. Augustine, Florida, but were purchased from the architects, and a superintendent of construction, Mr. Geo. O. Holmes, was placed in direct supervision of the work.

On April 3rd, 1911, the contractors were authorized to proceed with the work of construction and within two weeks afterward the first piling were being driven. Although the plans drawn by the architects had not provided for piling for the foundation, yet upon making the usual tests it was found that they would be necessary. This caused a further delay in the construction, as well as additional expense. A total of 100 piles of yellow pine were used in this work. The building is entirely of reinforced concrete, faced with buff pressed brick.

The work of filling in the lot with sand, preparing a terraced lawn, etc., is still under way, 17,358 cubic yards of sand having been, up to March 1st, 1912, placed in the lot.

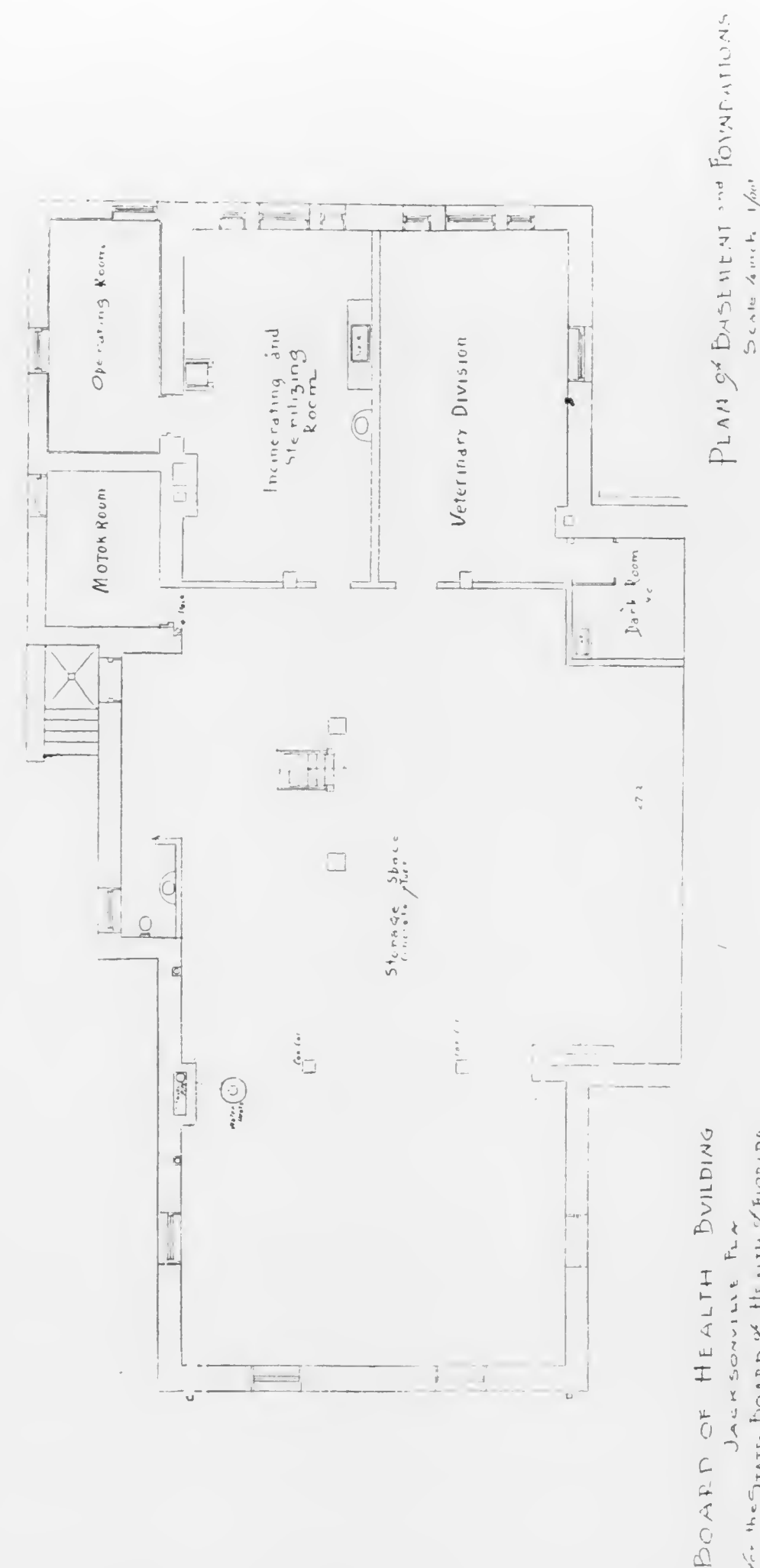
The outside dimensions of the building are 83 feet 9 inches by 43 feet 2 inches, not including the front steps. The total height, from the basement floor to the attic floor, is 34 feet 7 inches.

#### COSTS

Amount paid city of Jacksonville for site .....	\$100.00
Advertising for bids .....	50.96
Architect's fees (purchase of plans) .....	600.00
Contract for construction .....	29,000.00
Piling and extra foundation work .....	1,193.00
Extra charges by contractors .....	292.01
Plumbing contract .....	2,688.95
Electric wiring contract .....	919.95
Electric fixtures .....	450.00
Steam heat contract .....	1,021.00
Superintendent of Construction .....	500.00
17,358 cubic yards filling sand .....	3,851.50
Freight and drayage .....	6.45
Total cost .....	\$40,673.82

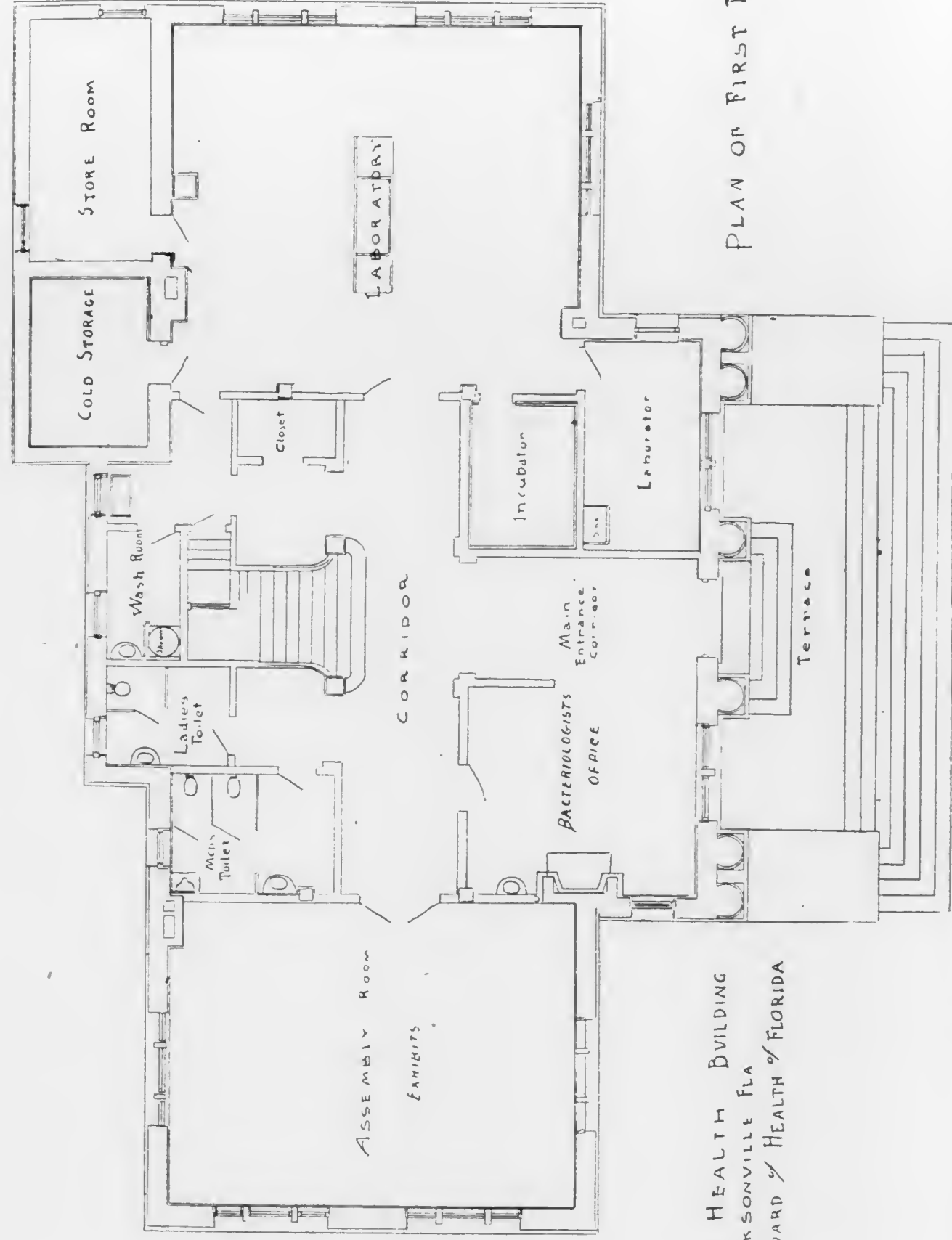
#### The Offices and Furnishings:

The purposes to which the various rooms are to be put are indicated on the drawings opposite this page, accompanying this report, and may be described as follows: The basement, in addition to having a large open space which will be used for storage purposes and in handling incoming and outgoing freight and express, has on the north a room for the veterinary division, an incinerating room, a sterilizing room, a dark room for micro-photographic work, an operating room for use in connection with animal inoculation, and a room on the west for the motor which is to operate the refrigerating plant. The heating and hot water furnaces are also in the basement.



BASEMENT, ADMINISTRATIVE BUILDING, STATE BOARD OF HEALTH

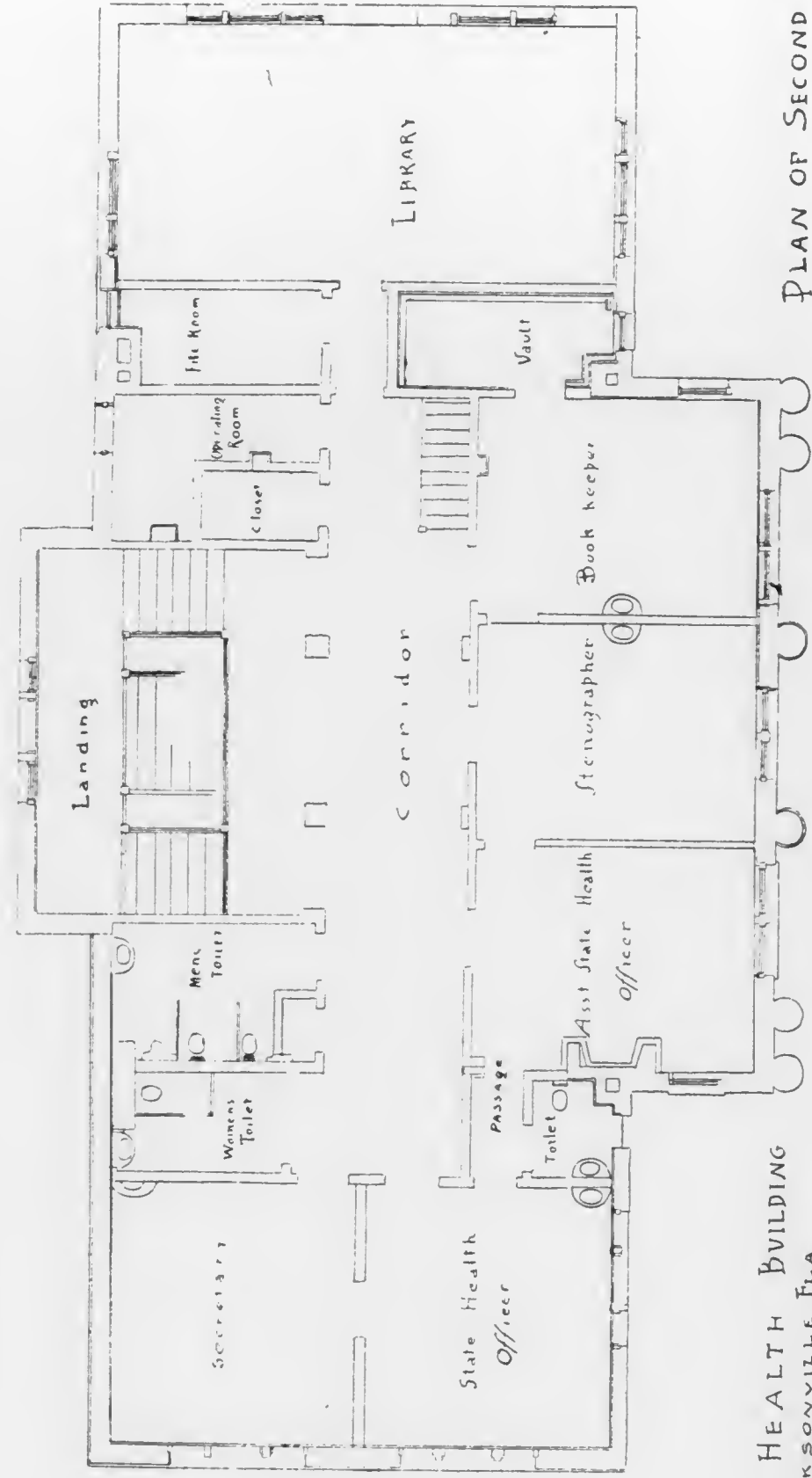




BOARD OF HEALTH BUILDING  
JACKSONVILLE, FLA.  
STATE BOARD OF HEALTH OF FLORIDA

PLAN OF FIRST FLOOR

FIRST FLOOR, ADMINISTRATIVE BUILDING, STATE BOARD OF HEALTH

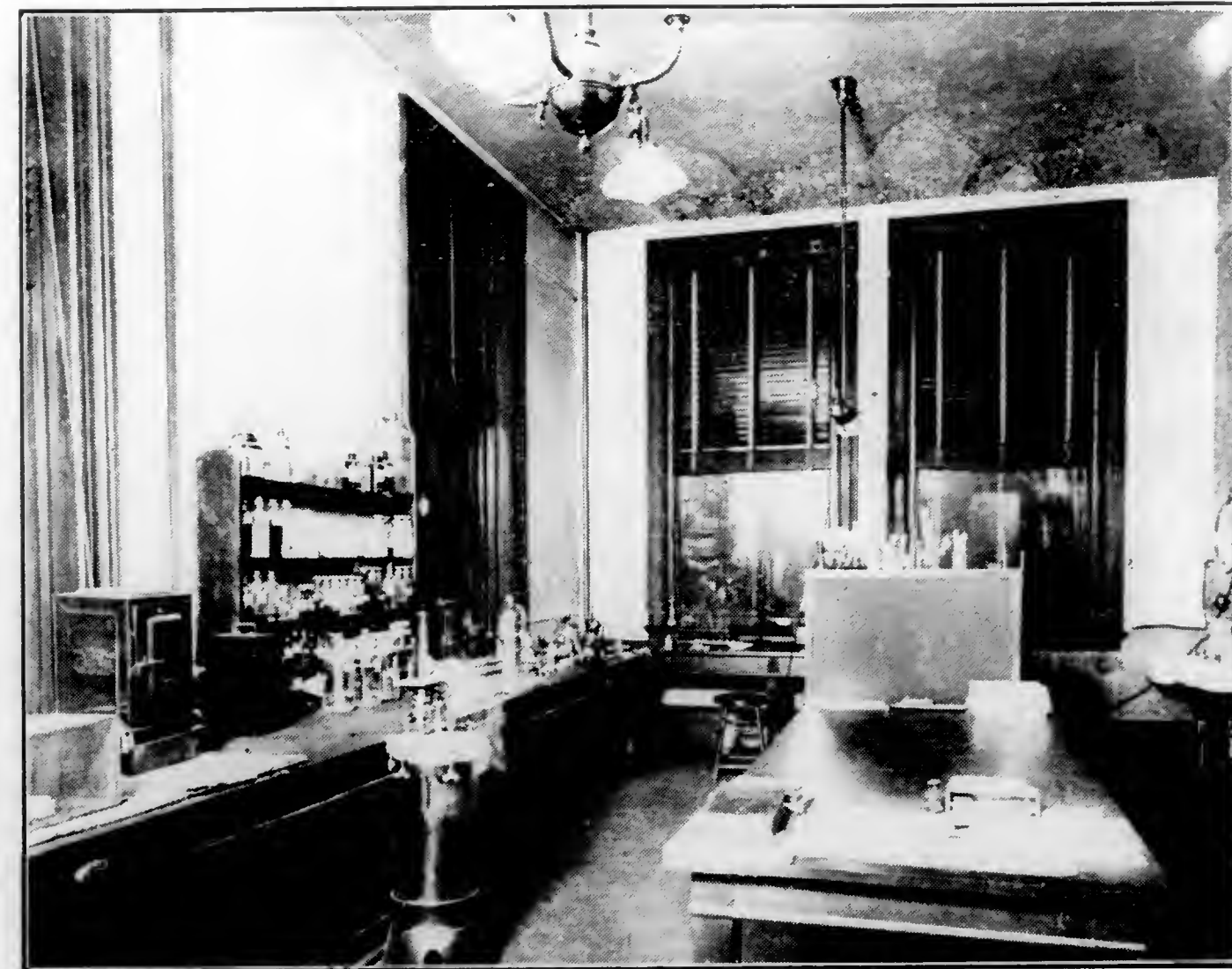


BOARD OF HEALTH BUILDING  
JACKSONVILLE, FLA.  
FOR THE STATE BOARD OF HEALTH OF FLORIDA

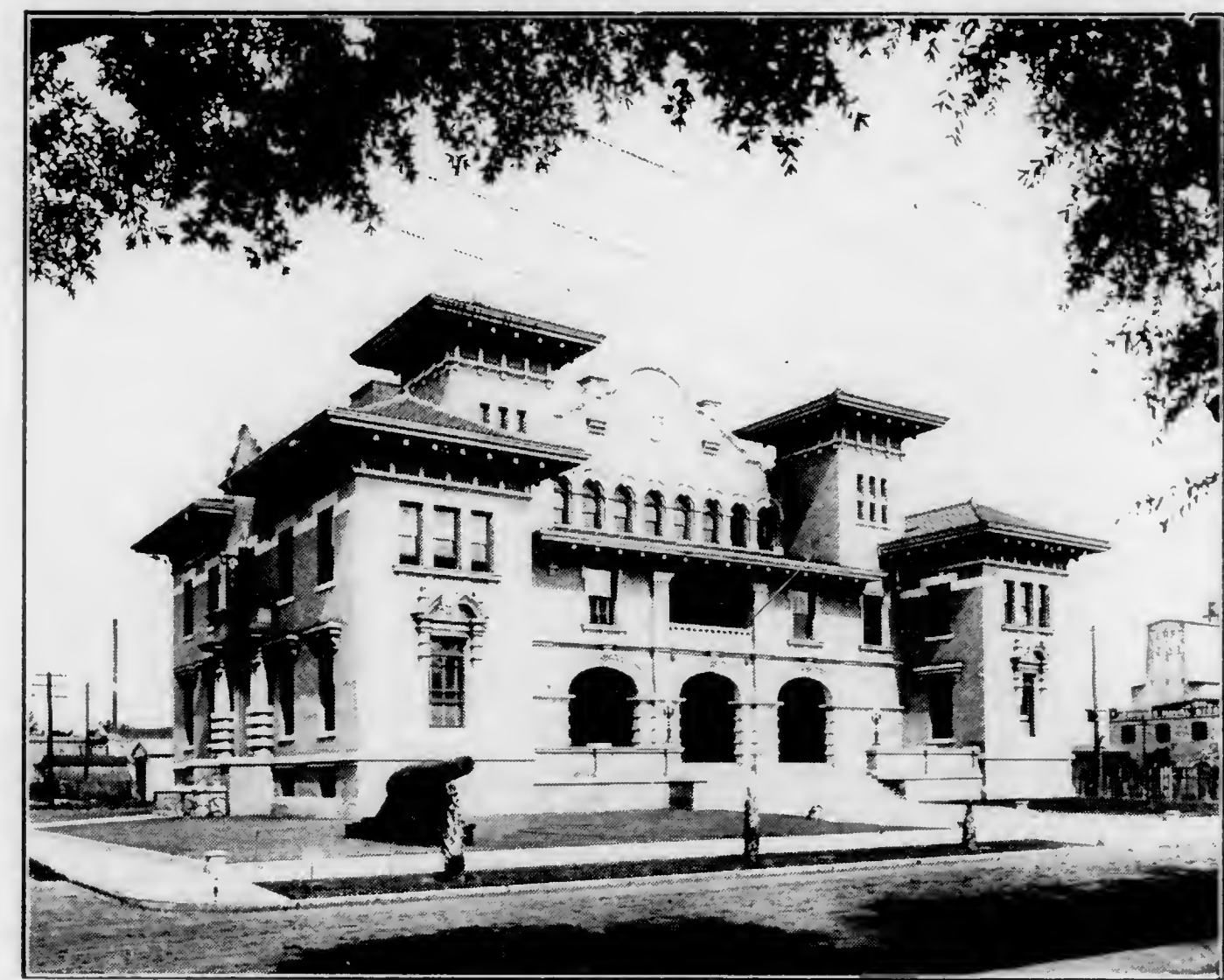
PLAN OF SECOND FLOOR

SECOND FLOOR, ADMINISTRATIVE BUILDING, STATE BOARD OF HEALTH





QUARTERS OF THE STATE BOARD OF HEALTH BRANCH LABORATORY IN—



CITY HALL, PENSACOLA, FLA.



STATE BOARD OF HEALTH BUILDING, TAMPA, FLA.



The first floor of the building has in its south end a public health exhibit room. The details of the exhibits are now being planned and within a few months can be opened to the public. The office of the senior bacteriologist, the general laboratory room (at the north), a private laboratory, incubator and cold storage rooms, make up the balance of the first floor.

The second floor of the building is used for executive offices, quarters being provided for the State Health Officer, his secretary, the Assistant State Health Officer, the stenographer and the bookkeeper. A large room at the north end of the building is to be used as a library and assembly room. A vault, constructed of reinforced concrete, opens into the bookkeeper's office. An operating room, for vaccinating against smallpox, typhoid fever and rabies, is also provided.

The attic at present is in an unfinished state, but will be used for transferred files and vital statistics.

The offices of the State Health Officer, the Assistant State Health Officer, the library and the senior bacteriologist are each to be furnished with "Mission" style, early English finish, furniture, all other offices to have golden quartered oak. The fixtures in the veterinary division and in the general laboratory rooms have been constructed of plain white oak, except that all shelves, backs and interior construction are of yellow pine, and interiors of drawers of birch, with fumed oak finish. All file cases throughout the building are of steel.

With this expansion in the quarters of the Board there will be a corresponding increase in the work, for it is intended to extend the scientific research work of the Board to include an investigation and survey of the state with regard to latent malarial carriers, special work on rabies, infantile diarrhea, latent gonorrhea, the common drinking cup, the bacterial flora of cities and towns in the state, and probably anti-venin work; also, a study of bovine uncinariasis and its relation to hookworm disease in the human; an extension of the distribution of public health literature, the establishing of a press bureau, etc. Plans are now being prepared for an "Animal House" to be located on the same site as the building, which will provide commodious and sanitary quarters for the various animals necessary in the bacteriological work of the Board.

## THE TAMPA LABORATORY

What the State Health Officer said in his 1909 and 1910 Annual Reports explains the reasons for the establishment of the Tampa Laboratory:

"The work of the laboratory (at Jacksonville) has been constantly increasing and to such an extent that a demand came also from the southern section of the state for a branch laboratory to be located at Tampa, the appeal being made not only by medical bodies, but by commercial bodies as well and the civic government both of Tampa and of neighboring towns in that section. This request the Board has seriously considered, and information having been obtained from the administrative government at Tallahassee that such a course would be legal, the same conditions that were initiated at Jacksonville were adopted at Tampa. The city council of Tampa then presented to the Board a very valuable lot at the corner of Florida avenue and Constant street, for this purpose." Plans and specifications were at once prepared for a suitable building, by Architects Shaw & Jay of Tampa, the contract for construction being awarded to Messrs. Dekle & McGucken of the same city.

The building was accepted by the Board at a special session held at Tampa in August, 1910, and the laboratory removed from its temporary quarters to the new structure.

The building at Tampa, constructed at a total cost of \$17,511.60, is illustrated on page . The laboratory proper is located on the second floor of the building, as well as the office of the bacteriologist in charge and the stenographer. Office space is also provided for the agent of the State Board of Health of Hillsboro County, and for the milk inspector of the city of Tampa.

## THE PENSACOLA LABORATORY

When the Board met in special session in February, 1910, the city of Pensacola presented a request that a laboratory be provided in that city to serve the western section of the state, and the State Board of Health authorized the State Health Officer to establish such an institution. As soon as practicable thereafter—during the month of June, 1910—the Pensacola Laboratory was opened. The city kindly provided the Board with two large and commodious offices in the City Hall (see page ) which answer admirably all purposes.

PUBLICATIONS OF THE STATE BOARD OF HEALTH OF FLORIDA,  
1889 to 1911

- No. 1. Rules and Regulations of the State Board of Health of Florida. Adopted April 6th, 1889. 12mo., pp. 16. Jacksonville, Fla., Times-Union Job Office, 1889.
- No. 2. Suggestions to Prevent Diphtheria, State Board of Health of Florida. Joseph Y. Porter, State Health Officer. 12mo., pam. pp. (4).
- No. 3. First Annual Report of the State Board of Health of Florida, Jacksonville, May 5th, 1890. With Amended Rules and Regulations. Jacksonville, Florida. DaCosta Printing and Publishing House, 1890. 12mo., pp. 28.
- No. 4. Second Annual Report of the State Board of Health of Florida, Jacksonville, March 29th, 1891. Jacksonville, Fla. DaCosta Printing and Publishing House, 1891. 12mo., pp. 86.
- No. 5. Third Annual Report of the State Board of Health of Florida, Jacksonville, May 2nd, 1892. Jacksonville, Fla. DaCosta Printing and Publishing House, 1892. 12mo., pp. 86.
- No. 6. Rules and Regulations of the State Board of Health of Florida, n. t. p., pp. 12 (2). (1892.)
- No. 7. Bulletin of the Florida State Board of Health, Vol. I, June, 1892, to June, 1893. *Twelve Issues of 8 to 16 pp.*
- No. 8. Fourth Annual Report of the State Board of Health of Florida, Jacksonville, March 22, '93. Jacksonville, Fla., DaCosta Printing and Publishing House, 1893. 12mo., pp. 136.
- No. 9. Florida Health Notes, Official Bulletin, Vol. II. July, 1893, to June, 1894. *Twelve Issues.*
- No. 10. Rules and Regulations of the State Board of Health of Florida. n. t. p., pp. 22. (1893.)
- No. 11. Fifth Annual Report of the State Board of Health of Florida, Jacksonville, March 31, '94. Jacksonville, Fla., DaCosta Printing and Publishing House, 1894. 12mo., pp. 114, 1 table.
- No. 12. Florida Health Notes, Official Bulletin, Vol. III. July, 1894, to July, 1895. *Twelve Issues.*
- No. 13. Catalogue of the Physicians of the State of Florida. Prepared by State Board of Health, January, 1895, Jacksonville. Vance Printing Co., 1895. 12mo., pp. 27.
- No. 14. Rules and Regulations of the State Board of Health of Florida. pp. 22. (1895.)
- No. 15. Sixth Annual Report of the State Board of Health of Florida, Jacksonville, January 1, 1895. Jacksonville, Fla., DaCosta Printing Company, 1895. 12mo., pp. 88.
- No. 16. Florida Health Notes, Official Bulletin, Vol. IV. August, 1895, to June, 1896. *Eleven Issues.*
- No. 17. Seventh Annual Report of the State Board of Health, for the year 1895, n. t. p., pp. 42.
- No. 18. Rules and Regulations of the State Board of Health of Florida, April 1st, 1896. Vance Printing Co., Jacksonville, n. d. 12mo., pp. 30.
- No. 19. Florida Health Notes, Official Bulletin, Vol. V. July, 1896, to June, 1897. *Twelve Issues.*
- No. 20. Rules and Regulations of the State Board of Health of Florida. Including Statutes of the State of Florida in force, 1897. 12mo., pp. 43.
- No. 21. Florida Health Notes, Official Bulletin, Vol. VI. July, 1897 to June, 1898. *Twelve Issues.*
- No. 22. Eighth Annual Report of the State Board of Health of Florida, Jacksonville, February 27, 1897. Jacksonville, Fla., DaCosta Printing Company, 1899. (For 1896.)



- No. 23. Ninth Annual Report of the State Board of Health of Florida. Jacksonville, January 1, 1898. Vance Printing Co., Jacksonville, n. d. (1898.) 12mo., pp. 94.
- No. 24. Bulletin in Relation to Yellow Fever Infection from Mississippi and Louisiana. Quarantine Circular No. 1, of the State Board of Health of Florida, 1898. pp. (12).
- No. 25. Florida Health Notes, Official Bulletin, Vol. VII. July, 1898, to June, 1899. *Twelve issues.*
- No. 26. Chapter 4695, Revised Statutes of Florida. Broadside, n. d.
- No. 27. Contagious Diseases. Leaflet No. 1. Precautions against smallpox. State Board of Health of Florida. F. W. Dennis & Sons, Printers, Jacksonville. (1899), pp. 8.
- No. 28. Tenth Annual Report of the State Board of Health of Florida, Jacksonville, February 1, 1899. Jacksonville, Fla., DaCosta Printing Company, 1899. 12mo., pp. 112, 1 table.
- No. 29. Florida Health Notes, Official Bulletin, Vol. VII, July, 1899 to ?
- No. 30. Eleventh Annual Report of the State Board of Health of Florida, Jacksonville, March 15, 1900. Jacksonville, Fla., East Florida Printing Company, 1900. 12mo., pp. 250, il. 15.
- No. 31. Reprint from Annual Report of the State Board of Health of Florida, Smallpox, 1900. East Florida Printing Co., Jacksonville, Fla., pp. 33.
- No. 32. Florida Health Notes, Official Bulletin, Vol. IX, July, 1900, to June, 1901.
- No. 33. Rules and Regulations of the State Board of Health of Florida, including Statutes of the State of Florida. Jacksonville, Fla., East Florida Printing Company, 1900, pp. 55.
- No. 34. Twentieth Annual Report of the State Board of Health of Florida. Jacksonville, February 19, 1901. Jacksonville, Fla., The Garrett Printing Company, 1901. 12mo., pp. 127, frontis. il. 11.
- No. 35. Compulsory Vaccination, Citations of Legal Opinions, etc., n. t. p., pp. 13, n. d. (1901).
- No. 36. Thirteenth Annual Report of the State Board of Health of Florida, Jacksonville, February 13, 1902. Jacksonville, Fla., the Garrett Printing Company, 1902. 12mo., pp. 213, frontis. il. 14.
- No. 37. Bacteriological Laboratory, pam. pp. 7, n.t.p., n. d., (1903.)
- No. 38. Directions for Preparing Specimens of Blood, broadside, n. d. (1903.)
- No. 39. List of Repositories, broadside, n. d., (1903.)
- No. 40. Fourteenth Annual Report of the State Board of Health of Florida. 12mo., n. t. p., n. d., (1904, pp. 63, 74, 1 table, frontis. il. 19.
- No. 41. Fifteenth Annual Report of the State Board of Health of Florida. 12mo., n. t. p., n. d. (1904), pp. 203, 1 table, frontis. il. 7.
- No. 42. A Part of the Year's (1903) Work in the State Board of Health of Florida Bacteriological Laboratory at Jacksonville, Fla. (Extract from the Annual Report of the State Health Officer for the Year 1903.) Eduardo Andrade, M. D., Bacteriologist. Jacksonville, Fla. The H. & W. B. Drew Company, printers, 1904, pp. 38.
- No. 43. Rules and Regulations of the State Board of Health of Florida, Jacksonville, Florida, 1904. The Floridian, pp. 24.
- No. 44. Public Health Laws of Florida. Extracts from the revised statutes of the state of Florida on general health subjects, n. t. p., n. d. (1904), pp. 11
- No. 45. Smallpox leaflet No. 2. Circular (1904), pp. 3.
- No. 46. Instructions to Sanitary Agents. Circular (1904), broadside.
- No. 47. Public Health Laws of Florida. Rules and regulations of the State Board of Health and United States quarantine regulations. Jacksonville, Fla., n. t. p., n. d. (1904), pp. 113.

- No. 48. Address of Dr. J. Y. Porter, State Health Officer. Prevention of contagious diseases. Jacksonville, Florida, August 1, 1905, The Floridian, pp. 4
- No. 49. Mosquitoes of Florida. By Hiram Byrd, M. D., of Jacksonville, Fla., Assistant to State Health Officer. Reprinted from the Medical News, June 19, 1905, pp. 16.
- No. 50. 16th Annual Report (for 1904) of the State Board of Health of Florida, n. t. p., n. d. (1905), 12mo., pp. 171.
- No. 51. Regulations Governing the Uniforms of Officers and Employees of the State Board of Health of Florida, 1906, pp. 4.
- No. 52. What services can the laboratory render in the diagnosis of fever? By Dr. E. Andrade, Bacteriologist, State Board of Health, n. t. p., n. d. (1906), pp. 5.
- No. 53. Symposium on Yellow Fever Management by Dr. Joseph Y. Porter, State Health Officer, Dr. Hiram Byrd, First Assistant to State Health Officer, Dr. Charles Edward Banks, Surgeon, U. S. P. H. & M. H. Service. Papers read before the Florida Medical Association, Gainesville, Florida, April 17-20, 1906, n. t. p., n. d. (1906), pp. 37.
- No. 54. Florida Health Notes, Official Bulletin, Vol. I (New Series) July, 1906, to June, 1907, pp. 191.
- No. 55. 17th Annual Report of the State Board of Health (for 1905), n. t. p., 12mo., 1906, pp. 272, 1 table, 1 map, frontis. il. 6.
- No. 56. 18th Annual Report of the State Board of Health of Florida, 1906. Capital Publishing Co., State Printers, Tallahassee, Fla., 1907, 12mo., pp. 149 frontis. il. 2.
- No. 57. Florida Health Notes, Official Bulletin, Vol. ii (New Series) July, 1907, to December, 1907, 6 issues, pp. 96.
- No. 58. Nineteenth Annual Report of the State Board of Health of Florida, 1907. Capital Publishing Company, State Printer, Tallahassee, Florida, 1908, 12mo., pp. 136.
- No. 59. About Mosquitoes and Other Parasites. A paper read before the Florida Medical Association. 1908. By Dr. Hiram Byrd, First Assistant to the State Health Officer, Jacksonville, Fla. The H. & W. B. Drew Company 1908, pp. 27.
- No. 60. Prevention of Tuberculosis. Joseph Y. Porter, State Health Officer, 1908, (English Text) pp. 2, (Spanish Text) pp. 2.
- No. 61. (Fly Poster.) From Flies and Filth to Food and Fever, 1908 (1st ed. cardboard.) (2d ed. cloth.) Broadside, colors, 22x11 1-2 inches, (English text).
- No. 62. (Fly Poster). De las Moscas e Inmundicias a la comida y la fiebre 1908, (cloth), broadside, colors, 22x11 1-2 inches, (Spanish text).
- No. 63. Sanitary leaflet No. 1. Mosquitoes (1908), pp. 4, il. 3.
- No. 64. Sanitary leaflet No. 2. Flies (1908), pp. 1, il. 1.
- No. 65. Spitting Prohibited, (1908), board, 5 1-4x9 in.
- No. 66. Se Prohibe Escupir. (Spanish text.), (1908.), board, 5 1-4x9 in.
- No. 67. Spitting Prohibited (for railway cars) 1908, board, 5 1-4x9 in.
- No. 68. Florida Health Notes, Official Bulletin, Vol. III. (New Series) Jan., 1908, to Dec., 1908, pp. 282.
- No. 69. Twentieth Annual Report of the State Board of Health of Florida 1908. Tallahassee, Florida, 1909, 12mo., pp. 184.
- No. 70. The Evolution of Consumption. (Cloth), 21x30 in., colors, 1909.
- No. 71. Evolucion de la Tisis. (Cloth), 21x30 in., colors, 1909. (Spanish text.)
- No. 72. Circular Letter (to the Physicians of Florida). Hookworm Disease, 1909, pp. 2.
- No. 73. Florida Health Notes, Official Bulletin, Vol. IV (New Series) Jan., 1909, to Dec., 1909, pp. 216.

- No. 74. Pulmonary Tuberculosis or Consumption is Communicable, 1910. board, pp. 2, (English text and Spanish text).
- No. 75. Twenty-first Annual Report of the State Board of Health of Florida, 1909. With Volume IV (1909), Florida Health Notes, 12mo., pp. 93, frontis. il. 2.
- No. 76. Hookworm. Folder, 3 1-2x6 in., pp. 4, 1910.
- No. 77. The Housefly. Reprinted from Florida Health Notes. Vol. 5, No. 7, July, 1910, pp. 11. il. 4.
- No. 78. Sewage Disposal. Reprinted from Florida Health Notes. Vol. 5, No. 7, July, 1910, pp. 7, il. 3.
- No. 79. Hookworm Disease. A Handbook of Information for All Who are Interested. Prepared Under the Direction of the State Board of Health of Florida, by Dr. Hiram Byrd, Assistant State Health Officer, October, 1910 12mo., pp. 70, il. 13.
- No. 80. Sanitary Inspection of Hotels and Boarding Houses. Circular. November, 1910, pp. 3.
- No. 81. Florida Health Notes, Official Bulletin, Vol. V, (New Series). Jan., 1910, to Dec., 1910.
- No. 82. Twenty-second Annual Report of the State Board of Health of Florida, 1910. With Volume V (1910), Florida Health Notes, 12mo., pp. 171.
- No. 83. Anti-Rabic Vaccine. Circular. April, 1911, pp. 2.
- No. 84. Malaria. Its Prevention and Control. By Graham E. Henson, M. D., E. Van Hood, M. D., E. W. Warren, M. D., Special Committee of the Florida Medical Association, for the Control and Prevention of Malaria, June, 1911, pp. 43, il. 9.
- No. 85. Smallpox. Poster. Board, 9x12 in., 1911.
- No. 86. How to Prevent Malaria—No Mosquitoes, No Malaria. Circular (1911), pp. 3.
- No. 87. Directions for the Prevention of Ophthalmia Neonatorum. Circular (1911), pp. 3.
- No. 88. Typhoid Primer. Prepared under the direction of the State Board of Health of Florida by Dr. Hiram Byrd, Assistant State Health Officer. December, 1911, pp. 45, il. 7.
- No. 89. Hog Cholera. By Charles F. Dawson, M. D., D. V. S., Veterinarian, State Board of Health. (A revision, etc., 4 1.). January, 1912, pp. 12.
- No. 90. Smallpox, (Poster, cloth.) *Now in press.*
- No. 91. Florida Health Notes, Official Bulletin, Vol. VI. (New Series). Jan., 1911, to Dec., 1911. *Now being bound.* pp. 204.
- No. 92. Rules and Regulations of the State Board of Health of Florida, Statutes of Florida relating to Public Health and Powers and Duties of the State Board of Health of Florida, March, 1912. *Now in press.* pp. 62.
- No. 93. Twenty-third annual report of the State Board of Health of Florida, March, 1912. pp. —

Of the above publications, numbers 1 to 58 and numbers 60, 63, 64, 68, 69, 73 and 75 are exhausted.

## DISTRIBUTION OF LITERATURE

During 1911 a record was kept in the office, by means of a card index, of all the literature distributed by the State Board of Health, and the following is a compilation of this record:

Subject:	No. of pieces mailed to Florida addresses	to other States	to foreign countries	Totals
Annual Reports -----	528	188	29	745
Extra copies of Health Notes--	668	279	12	959
Hookworm Disease:				
Booklets -----	1676	183	14	1873
Leaflets -----	3218	212	14	3444
Housefly:				
Posters -----	114	90	10	214
Pamphlets -----	247	65	2	314
Malaria -----	952	55		1007
Mosquitoes -----	906	36	2	944
Sewage disposal -----	117	28	--	145
Spitting Prohibited -----	364	16		380
Tuberculosis:				
Folders, "Dont's" -----	153	9		162
Posters -----	68	29	5	102
Booklets -----	64	--	--	64
Typhoid Fever -----	318	8	--	326
Ophthalmia neonatorum -----	706	21	--	727
Miscellaneous, including Laws, Rules, Smallpox and Government publications -----	767	66	--	833
Totals -----	10,866	1,285	88	12,239
Florida Health Notes: Regular mailing list, 12 issues -----	194,864	5,076	360	200,300
Total number of pieces distributed -----	205,730	6,361	448	212,539



## REPORTS OF ASSISTANT STATE HEALTH OFFICERS AND AGENTS OF THE STATE BOARD OF HEALTH

A reasonable conception can be had of prevailing conditions affecting the health of the communities in the different sections of the state from the subjoined reports of the Assistant State Health Officers and of the County Agents of the State Board of Health. These reports are interesting because in the matter of correspondence they deal specifically with the subject and omit generalities, which latter, as a rule, are valueless and convey no real information, and which those who are interested in health subjects alone desire to obtain. This feature of presenting the thoughts and opinions of those who have done the field work and have represented the Board during the preceding year has met with universal favor in the past by not only the citizens of the state, but has been kindly commented upon by other boards of health.

In the report by Dr. Hiram Byrd, the office assistant to the State Health Officer, mention is made of the management of certain diseases and the futility of a method of quarantine in their control; likewise the difficulty attending the detection of these cases because of the very mildness of the attacks. Very frequently they escape not only the notice of the family, when no physician is called, but even are treated as trivial when medical aid is invoked.

Dr. Byrd discusses these matters in a very interesting and instructive way, and leaves nothing further to be said, except to emphasize what he lays particular stress upon, and that is the influence which warm latitudes and warm countries have upon certain eruptive diseases, and the difficulties attending the detection and prevention of spread on account of the mildness of the sickness.

### BACTERIOLOGICAL LABORATORY DIVISION

The bacteriological laboratories of the State Board of Health, of which there are three, have done very excellent work during the past year. According to the reports of the bacteriologist in charge of each laboratory, 20,234 specimens have been examined, and, computing the cost of equipment and maintenance, such as salaries of the staff of the laboratories, rents, supplies, expressage and all other expense which may be justly charged to the support of labo-

ratories, the cost to the state per specimen for this work has been eighty-one cents, a not unreasonable or exorbitant sum. Such service, if done at a private or commercial laboratory, would have cost the citizens three times as much if not more.

It has been remarked that the State Board of Health adopted the policy at the very commencement of its service to the people of Florida in 1889, of *no charge* for any assistance which it might render or be asked to perform, and in giving free bacteriological service it is recognized that the Board is merely returning to the people a dividend, great or little as the people value such service, on the yearly investment obtained by the gratuity of the people in their contribution of support. The physician attends the sick, the sick belong to the citizenship of the state and has given without grudge or complaint to the monetary support of the Board, and the Board, recognizing this generosity, merely returns to the citizen in increased value on the investment a profit which will tend to prolong his life and decrease both his period of sickness and the sickness itself.

A STATEMENT SHOWING THE AVERAGE COST PER SPECIMEN AT THE  
BACTERIOLOGICAL LABORATORIES OF THE STATE  
BOARD OF HEALTH OF FLORIDA

1911

Location	Number of Examinations	Total Cost	Average cost per specimen
Jacksonville -----	10,576	\$ 9,103.69	\$0.86
Tampa -----	7,869	5,015.21	.67
Pensacola -----	1,788	2,339.75	1.30
1911 Totals -----	20,233	16,458.65	.81
and 1903-1910 -----	37,839	46,081.28	1.22
1903-1911 -----	58,072	\$62,539.93	\$1.07

## VETERINARY DIVISION

The reports of those who have served as veterinarians during the latter end of 1911, with a summary of work accomplished by previous veterinarians during the early part of the year, are submitted in their proper places, and include not only immunizing against hog cholera, but the inspection and testing of horses and mules for glanders, and testing of cows for tuberculosis.

The veterinary division of the Board's work, that which deals with disease and health conditions in the lower animals, has undergone some changes during the past year, both in personnel and in the character of the work accomplished.

On April 10th, 1911, Dr. Thomas J. Mahaffy, who had been veterinarian of the Board for the previous four years, resigned. While to lose his services was regretted, yet it is also appreciated that a better opening presented itself in private practice in Jacksonville, yielding more financial compensation than the position which he had been holding, and he, therefore, could not be found fault with for improving his circumstances.

Dr. R. M. Buffington succeeded Dr. Mahaffy on July 29th, 1911, and remained with the Board, doing excellent service, until October 6th, when, receiving an appointment as veterinarian in the United States Army, he resigned to take up his duties in that field.

Dr. Charles F. Dawson, who at one time was Professor of Veterinary Science at the University of Florida when that institution was located at Lake City, and later veterinarian of this Board, but who resigned in 1907 to accept a position in the Agricultural Experiment Station of Delaware, was invited to return to Florida as veterinarian and fortunately, his services were secured. While in Delaware, Dr. Dawson was also connected with the Bureau of Animal Industry of the United States Department of Agriculture at Washington, as a co-operative worker in the field of especial research in animal diseases of that department. His monographs are accepted as authoritative by the Department of Agriculture and published as bulletins of the government. Therefore, the State Health Officer feels in securing the services of Dr. Dawson that, when space permits, as it will when the new building is completed and occupied, original research work can be instituted in ascertaining the relation of certain diseases of the lower animals to the human, besides having a diagnostician of superior ability for the

routine determination of many of the lesser troubles which afflict the lower animals in the same ratio as the human is annoyed, and for the lessening and abatement of which numerous applications are being constantly made by the farming sections of the state.

The legislature of 1911 imposed by enactment on the state Board of Health the manufacture and distribution of hog cholera serum without charge to the farmers of the state, but it was not until August that the Board was in a position to take this special work up and act. After consultation with the state comptroller it was determined by the State Health Officer that instead of trying to construct at this time a plant for the manufacture of hog cholera serum, it would be more economical to purchase such quantities as would be needed from the commercial houses having it for sale.

Very soon it was found that so many applications came daily to the Board that the services of one veterinarian would be totally inadequate to meet the demands and to be of that assistance to the agricultural districts which the statute contemplated and which the State Health Officer wished to give.

Therefore, that the efficiency of the service might be increased, additional assistance was secured temporarily by the employment of Dr. W. P. Link of Tampa and of Dr. J. W. DeMilly of Tallahassee, who very kindly and promptly came to the aid of the Board in this work.

As rapidly as possible and with no time intentionally lost, every effort has been made to meet the demands for immunization of hogs against hog cholera, but to have done this work as carefully and as rapidly as the necessities of the situation called for, at least fifty to one hundred assistants would have had to be employed in the field and therefore, a reorganization of the method of operation is suggested, by which representatives of the Board in the agricultural districts will do the work of immunization from time to time as it may be needed, so that no delay may occur in properly getting the serum to the district where needed and promptly administering the same, and that there may be as little financial loss to the farmers as possible, which, unfortunately, was not the case last summer.



## 1911 LEGISLATION

At the legislative session of 1911 three bills were passed relating to and affecting the State Board of Health.

Provision was made for a sanitary engineer to be employed by the board when the services of such an expert authority were needed from time to time. As yet the Board has engaged no one, because of the matter of compensation, and until this can be harmonized in accordance with the Statute, there will be yet some delay before this needed addition to the personnel of the State Board of Health can be effected.

One of the pet measures recommended and advocated by Governor Gilchrist at the last session of the legislature was to care for the crippled children of the state. The bill placed the operation of this law under the State Board of Health, but the requirements of the bill are so ambiguous and the language of the Statute so confusing that until the Board can have a meeting and invite the Governor to be present so that the real object of the measure might be understood, it will be wise to defer any attempt to carry this enactment into execution. It is doubtful, too, whether there would be found parents willing to surrender their afflicted loved ones to the care of the state to be treated and nursed in a public institution, away from their parental control and fond care.

It is not believed there are enough of these afflicted ones in the state to warrant the Board in constructing a specially designed hospital for the accommodation of so few as it is thought will avail themselves of its privileges; and again, the term "cripple" is so broad in its definition that it is not understood just what character of deformities or afflictions is meant to be treated at the expense of the state.

Mention must not be omitted of the very commendable measure introduced in the senate at the last session of the legislature, which was also augmented by a similar bill in the house, to require hotels and boarding houses to screen kitchens, dining rooms, and hallways leading thereto, against flies and mosquitoes. Evidently, the efforts of the Board through the *Health Notes*, to attract and create interest in insect borne diseases had made an impression on the thinking and reasoning people of the state, for two years

ago the State Board of Health, at a called meeting at Tampa, passed a rule that hotels and boarding houses should have kitchens and dining rooms screened against flies and bedrooms screened against mosquitoes, or, in the absence of the latter, for sleeping rooms to be provided with mosquito nets for all occupants. And, too, a further regulation was passed at the same time requiring stables when located within five hundred feet of any dwelling, to have screened manure bins, and in places where surface closets are used, they too should be screened against the entrance of flies. Whereupon there went up a howl of indignant protest all over the state that the rights of the citizen were being invaded by the State Board of Health. So it is gratifying to note that the first legislature which assembled after the Board had acted, as it thought, and was convinced at the time, for the good of the whole state, gave its approving commendation by the passage of a statute embodying the same requirements.

Another measure which was passed by the last legislature, was one authorizing the Board to establish a plant for the manufacture of hog cholera serum and to provide for the distribution of the serum. Elsewhere this has been discussed, and is only mentioned now in enumerating the three principal features affecting the State Board which the legislature had under consideration and provided for at its last session.

## FUNDS

The finances of the State Board of Health may be said to be in a very satisfactory condition, sufficient money being in the hands of the State Treasurer to the credit of the Board to meet all current and incidental expenses, and also extraordinary expenses of a not very extended nature. As the support of the health department of the state is had from a one-half mill tax upon the assessable property of the state, the amount collected through the Comptroller's office varies of course with the total collection of taxes during the year, and too, as the property values of the state increase with growing population and bringing in of new industries, it may be expected that the funds of the Board will grow larger from year to year. Therefore, as the funds collected are not transferred to the Board for its own disposal and management but are drawn upon by properly authorized and approved vouchers through the office of the Comptroller, the exact amount of money which the Board has to its credit in the hands of the State Treasurer at the end of each month can only be estimated from this office.

## EXPENDITURES

The expenses of the Board for the past year have been considerably increased over former years, for the reason that in addition to a building constructed at Jacksonville for the Executive Offices and Central Laboratory of the State Board of Health, recent legislative enactments have placed additional duties upon the Board, which likewise have caused additional expenditures. For instance, the administration of hog cholera serum to hogs of the farmers of the state, has, during the five months of the year 1911, added \$3,000.00 to the expenses of the Board over the year 1910. The number of persons exposed to hydrophobia or bitten by rabid animals, for whom the Board has provided the Pasteur treatment gratuitously, has been increased by one hundred per cent. over the amount expended in the same direction during the year 1910.

The several items of expenditures are given in itemized form and clearly indicate the manner in which the funds of the Board have been expended. Due economy has been considered in all instances and careful scrutiny even of such necessary expenditures as have been made, has been insisted upon. Therefore, it can be

truthfully said that all safeguards have been thrown about the funds of the state collected for health purposes which have been dispensed through the State Board of Health and for which the people of the state have so generously and willingly contributed in this direction.

This fact, and an important one, should never be overlooked or lost sight of: the State Board of Health makes no special charge to the individual or the public in general for any sanitary service or any other kind of service\* because the Board likewise recognizes that the people of Florida are paying, each individual as well as corporate interests, for the maintenance of the Board through direct legislation, and is therefore entitled to the best that the Executive Office can give without further assessment on its purse. This custom does not prevail in many other states, where charges are made for certificates and permits of different kinds, issued under the seal of the Board, and for the veterinary work, the income from such sources augmenting the annual appropriation of the legislature for the health department. The financial aid from the people and methods of management and enforcing rules and regulations is so different in Florida from those of other states that the "Florida method" is looked upon as unique in itself, receiving commendation and approval wherever known and understood.

## 1911 EXPENDITURES

The following tables of receipts and expenditures for 1911 show the total amount of money obtained from the state treasurer and by special warrants from the state comptroller, together with the manner of expenditure of such sums. At a glance, therefore, it can be learned how the money of the taxpayers for the support of the State Board of Health has been expended and the definite objects of such disbursements.

\*Except that when the Pasteur treatment is furnished to persons financially able to bear the expense, they are expected to pay the cost of the same; the treatment is furnished free to those unable to purchase or pay for it.



## No. 1.

## THE EXPENDITURES IN DETAIL

	Items.	Totals.
Per diem and mileage, Members of the Board, attending one meeting .....	\$ 157.60	\$ 157.60
Salaries and travel expenses:		
Salary State Health Officer .....	3,000.00	
Travel expenses State Health Officer .....	751.75	3,751.75
Salaries, four Assistant State Health Officers.....	7,910.41	
Travel expenses, four Assistant State Health Officers .....	3,427.83	11,338.24
Salaries County Agents .....	2,550.00	2,550.00
Salaries, Veterinary Division .....	1,155.13	
Travel expenses, Veterinary Division .....	991.16	2,146.29
Salaries of Sanitary Patrolmen, Jacksonville, Tampa, Pensacola, Key West and Miami .....	3,600.00	3,600.00
Maintenance of Executive Office, Jacksonville:		
Clerical assistance, which includes pay of two clerks and office boy, together with salary and travel expenses of Secretary to the State Health Officer .....	4,029.99	
General office expenses, including office rent, telephone charges, postage, expressage, office fixtures and other incidental expenses .....	1,711.22	
Printing, stationery, publications, records, etc., ..	2,647.20	
Telegraph tolls .....	440.06	
Insurance, and miscellaneous items .....	105.45	8,932.93
Equipment and maintenance, County Isolation Hospitals:		
Dade County .....	1,239.31	
Duval County .....	5,763.94	
Escambia County .....	517.50	
Hillsboro County .....	1,452.89	8,973.64
Smallpox expense, unclassified .....		6,153.42
Vaccine (smallpox) .....		3,953.16
Diphtheretic and tetanic antitoxins .....		423.23
Pasteur treatment for the indigent .....		1,904.15
Expense incident to uncinariasis, unclassified .....		2,323.95
Attorney's fees .....		102.00
Reimbursement for glandered animals .....		3,970.00
Medicines, disinfectants, (typhoid, Key West, 1910.)..		155.75
Hog cholera serum .....		3,070.28
Bacteriological Laboratories:		
Jacksonville: Salaries, Senior Bacteriologist, two assistants, stenographer and orderly .....	6,383.08	
Equipment and maintenance .....	2,720.61	9,103.69
Tampa: Salaries, two bacteriologists and janitor..	3,919.92	
Equipment and maintenance .....	1,095.29	5,015.21
Pensacola: Salaries, one bacteriologist and office boy .....	2,179.92	
Equipment and maintenance .....	159.83	2,339.75
Total operating expenses .....		\$79,965.04
Amount paid on construction of Jacksonville building .....		23,529.90
Total expenditures, 1911 .....		\$103,494.94

## No. 2

Statement of money received upon requisition upon the State Comptroller, showing amounts of the requisitions, and the amounts expended monthly by the Board to meet its expenses:

Month	Regular Requisitions	Special Requisitions	Amount expended monthly
January .....	\$ 2,500.00	\$ 230.59	
January .....		2,747.19	\$ 5,447.78
February .....	2,500.00	334.14	
February .....		2,914.52	5,748.66
March .....	2,500.00	349.13	
March .....		750.00	
March .....		2,802.95	6,402.08
April .....	2,500.00	342.24	
April .....		3,257.28	
April .....		2,485.82	
April .....		2,697.45	11,282.79
May .....	2,500.00	377.80	
May .....		3,074.28	5,952.08
June .....	2,500.00	452.48	
June .....		794.75	
June .....		675.00	
June .....		2,937.64	7,359.87
July .....	2,500.00	231.14	
July .....		2,494.53	
July .....		1,719.90	6,945.57
August .....	2,500.00	393.03	
August .....		10,178.45	
August .....		2,470.14	15,541.62
September .....	2,500.00	173.03	
September .....		2,107.78	
September .....		851.95	5,632.76
October .....	2,500.00	259.62	
October .....		1,040.00	
October .....		2,332.79	
October .....		2,526.32	8,658.73
November .....	2,500.00	379.13	
November .....		3,921.29	6,800.42
December .....	2,500.00	395.13	
December .....		787.75	
December .....		450.00	
December .....		11,175.00	
December .....		2,384.70	17,692.58
Totals.....	\$ 30,000.00	\$ 73,494.94	\$103,494.94

The expenditures of the Board as shown by the itemized statement, were but slightly increased over 1910, omitting the amount expended in the erection of the new building at Jacksonville; and it must not be forgotten that the Legislature of 1911 added to the duties of the Board in a manner which directly called for additional disbursements. Allusion is made and attention is particu-

larly directed to the free distribution and administration of hog cholera serum to the agricultural interests of the state.

#### REIMBURSEMENT FOR GLANDERED ANIMALS

Again, another fact contributing to the sum total of outlay must not be lost sight of: The Legislature of 1911 passed an enactment directing that certain animals killed during an outbreak of glanders in Ocala in 1909 should be paid for out of the funds of the State Board of Health at *the full* appraised value of each animal destroyed, instead of at a maximum value of seventy-five dollars as the State Statute previously enacted, provided. So, too, in respect to animals killed at Newberry in January, 1911, on account of glanders, but which had not been in the state a year, and, therefore, under the law, did not come within the provision of payment by the state: a special legislative enactment was passed directing payment from the Board's funds, the same as if no such hindrance as to time in the state existed. Incidents such as these, while materially increasing the amount of money expended by the Board during the year, do more: they tend to seriously embarrass the Executive Office in carrying out the provisions of the law which deals with the management of contagious diseases occurring among the domestic animals and live stock of the state, and it can be readily understood how such setting aside of a general law in special instances, will cause irritation on the part of stock owners similarly unfortunate, but who, less favored in legislative influence, are compelled, under the law, to either accept what the General Statutes on the subject directs or receive no compensation whatsoever from the state.

That this subject may be the better understood, there is herewith submitted the information bearing upon the outbreaks at both Ocala, and at Newberry, in 1911, which was furnished to the Senate Committee on Claims:

#### SYNOPSIS OF PREVALENCE OF GLANDERS AT OCALA, FLORIDA, JULY—AUGUST, 1909.

Number of animals tested with mallein .....	164
Number of healthy animals .....	102
Number of animals diagnosed as glandered .....	62
(all of which reacted to the mallein test.)	

All animals reacting to the mallein test, and thus diagnosed as glandered, were killed, buried and covered with lime.

Officials in charge of outbreak: Dr. Thomas J. Mahaffy, Veterinarian State Board of Health, assisted by Dr. C. P. Mauldin, of the United States Bureau of Animal Industry.

Owners of animals and reimbursements made, as follows:

Owners and address.	Number of animals killed	Number of animals paid for	Number of animals not paid for	Amount
Ellen Hoard, Ocala .....	1	1	.	\$ 75.00
Joe Simpson, Ocala .....	1	1	.	75.00
Dr. S. H. Blitch, Ocala .....	1	1	.	75.00
R. L. Keating & Co., Ocala .....	1	1	.	75.00
Knight & Lang, Ocala .....	2	1	1	75.00
Leslie L. Horne, York .....	1	1	.	75.00
Hon. Joseph Bell, Ocala .....	1	1	.	75.00
Harvey Clark, Ocala .....	2	2	.	150.00
Q. I. Roberts, Ocala .....	2	1	1	75.00
Lee Howell, Ocala .....	1	1	.	75.00
Mrs. L. A. McDowell, Ocala .....	1	1	.	75.00
Mrs. D. W. Tompkins, Ocala .....	1	1	.	75.00
Louis E. Lang, Ocala .....	1	1	.	75.00
W. M. Igou, Eustis .....	1	1	.	75.00
J. Rentz, Levon, .....	1	1	.	75.00
A. M. Bobbitt, Ocala .....	1	1	.	75.00
Mary E. Bartley, Ocala .....	1	1	.	50.00
Tompkins & Cobb, Ocala .....	23	10	13	750.00
W. M. Gist, McIntosh .....	1	1	.	75.00
F. E. Haskell, Weirsdale .....	1	1	.	75.00
M. Mickens, Ocala .....	5	1	4	75.00
John D. McDuffy, Ocala .....	5	5	.	375.00
W. M. Johnson, Ocala .....	1	1	.	75.00
W. H. Jones & Son, Ocala .....	1	.	1	.....
J. Camp, Ocala .....	4	.	4	.....
J. C. Marshall, Ocala .....	1	.	1	.....
Totals:	—	—	—	—
No. animals killed .....	62			
No. animals paid for .....		37		
No. animals not paid for .....			25	
Total amount paid in reimbursing owners .....				\$2,735.00

#### Remarks:

In those instances where owners were not reimbursed for the loss of any or all animals destroyed, it was found that the conditions specified in Chapter 5933, Laws of Florida, 1909, relating to reimbursement, could not be complied with or the facts necessary to obtain reimbursement could not be established. The Law cited herein provides that in order for the owner to be reimbursed for an animal which has been destroyed by the State Board of Health on account of its being infected with glanders, the animal shall have been owned and kept within the State of Florida one year previous to its condemnation; that the animal shall have contracted glanders in Florida; and that no person shall be paid for more than ten (10) animals in any one year.

It is believed by the State Health Officer, and by the veterinarian of the State Board of Health who was in charge of the occurrence, that if ten animals showing glanders in its incipency by reacting to the mallein test in 1905, had been killed as *advised* by this office, instead of being sold and scattered through-



out the county, that the epidemic of 1905 at Ocala would have been prevented; and that the infection was conveyed by an animal belonging to O. K. Grocery Company from the stables of Tompkins & Cobb to the stable of Dr. Guerrant.

The following are copies of correspondence in regard to the claim of Messrs. Tompkins & Cobb:

*From the State Health Officer to the State Comptroller:*

Key West, Fla., Sept. 3, 1909.

"Hon. A. C. Croom,  
State Comptroller,  
Tallahassee, Florida.

My Dear Mr. Croom:

Will you kindly settle the following point for me; Tompkins & Cobb, operating a partnership, a livery business at Ocala, lost 24 (including one animal the property of Mrs. D. W. Tompkins) horses from Glanders. They have each made a claim, individually, for ten horses. Now, is this allowable? It will be remembered that paragraph 3, Section 9, Chapter 5933, Laws of Florida, 1909, reads: 'That no person shall be paid for more than ten animals in any one year.'

According to my understanding they owned together the 24 horses. But is it proper to claim that 12 horses were owned by each of the men? or is my understanding correct—that the 24 horses were owned by one individual—a partnership?

Another point I would be obliged to you for a ruling on: Mrs. D. W. Tompkins also puts in claim for one horse which it is contended she owns separately from the property of her husband. Now, if she is not a freeholder under the law, and so published according to statute, is her separate claim for this horse allowable?

You can appreciate, Mr. Croom, that these points are continually arising, and where there is a question of money payment, many expedients are resorted to, to have the state responsible for claims of this kind.

I would be obliged to you for a decision in these matters as early as you can give it to me.

Yours very truly,

(Signed) JOSEPH Y. PORTER,  
State Health Officer."

*Reply by the State Comptroller to the State Health Officer:*

Tallahassee, Sept. 7, 1909.

"Dr. J. Y. Porter,  
State Health Officer,  
Jacksonville, Florida.

Dear Sir:

Upon receipt of your letter of the 3rd instant, I submitted it to the Attorney General for his opinion, a copy of which I herewith enclose you.

Yours very truly,

(Signed) A. C. CROOM,  
Comptroller.

The opinion of the Attorney-General, enclosed with the above mentioned letter, is as follows:

Tallahassee, Sept. 7, 1909.

"Hon. A. C. Croom,  
State Comptroller,  
Tallahassee, Fla.

Dear Sir:

Replying to your letter of this date, with enclosure from Dr. Porter, and wherein you ask my opinion upon the questions which he propounds, I beg to say that I agree with Dr. Porter, that where a firm—a partnership, loses

horses with glanders, the firm would not be entitled to pay for more than ten horses in any one year. You will note that the Act in providing for the payment of horses dying with the glanders, says: Section 9, "The owners of such animal or live stock shall be entitled to be paid for such animals or live stock by the State Board of Health in the following manner;" then the manner is prescribed in the remainder of the section.

If the stock belongs to a partnership, then the partnership is the owner, and the members of the firm as individuals are not the owners of the stock. The law provides that the payment shall be made to the owner.

Answering the other question, I beg to advise that a woman may be the owner of property—a horse—and entitled to pay therefor although she is not a free-holder.

Yours very truly,

(Signed) PARK TRAMMELL,  
Attorney General.

Whereupon the State Health Officer had vouchers prepared to cover these two claims in accordance with instructions contained in the opinion of the Attorney-General, and wrote the following letter to claimants:

*Letter from the State Health Officer to Tompkins & Cobbs*

Key West, Florida, Sept. 13, 1909.

"Messrs. Tompkins & Cobb,  
Ocala, Fla.

Gentlemen:

Referring to the claim of A. C. Cobb for reimbursement for ten animals destroyed account glanders, July 7, 1908; and also to the claim of D. W. Tompkins for reimbursement for ten animals destroyed account glanders, same date; and referring to my letter of the 3rd instant in regard to claims entered by individual members of a partnership:

Enclosed herewith is a copy of opinion rendered in this matter by the Attorney-General of the State, from which it will be seen that payment will have to be made to Tompkins & Cobb, a partnership, for ten animals, and that it is not possible for the State Board of Health to pay the individual claims entered.

Vouchers have therefore been prepared covering ten animals, and are enclosed herewith for signature. A copy of this letter has been made a part of enclosures to accompany the claim. The enclosed vouchers should be signed in duplicate, and returned to the State Board of Health at Jacksonville, and when received there will be placed in the way of settlement as soon as it is possible.

It is indeed unfortunate that your firm should have to undergo such an expense on account of glandered animals, but under the provisions of the Statute—Chapter 5933—no reimbursement other than for ten animals can be made.

Yours very truly,

(Signed) JOSEPH Y. PORTER,  
State Health Officer."

On September 27th, 1909, the State Health Officer received from Messrs. Tompkins & Cobb the signed vouchers; also a letter regarding the claim which they requested should be attached to the claim and to the vouchers when forwarded to the State Comptroller; this was done by the State Health Officer, and the letter from Messrs. Tompkins & Cobb will therefore be found attached to voucher No. 10,964 in Special Requisition No. 67, October, 1909, of State Board of Health upon the State Comptroller.

On the same date, September 27th, 1909, the State Health Officer having

written Messrs. Tompkins & Cobb in acknowledgment of the receipt of vouchers and letter, and having stated to them that their letter would be made a part of and would accompany the claim and vouchers, also wrote a letter as follows to the State Comptroller:

"Hon. A. C. Croom,  
State Comptroller,  
Tallahassee, Fla.

Key West, Fla., Sept. 27, 1909.

Dear Sir:

I am today in receipt of a letter from Messrs. Tompkins & Cobb, of Ocala, Fla., returning to the State Board of Health signed vouchers covering reimbursement for ten horses, \$750, condemned and destroyed at Ocala, Florida, July 7th, 1909, account glanders. Payees request in letter mentioned that that letter be made a part of the record in this claim, and I have today granted the request, notifying Messrs. Tompkins & Cobb of such action. The statement is made in that letter that the vouchers are signed under protest, as this payment is not satisfactory. But in accordance with the opinion of the Attorney General, as shown in his letter of Sept. 7th, copy attached herewith, this office can only render vouchers to cover ten animals, although 23 animals belonging to the partnership of Tompkins & Cobb were killed on account of glanders.

In connection with the above settlement and protest, I beg to state that the records of the office of the State Board of Health show that in 1905 glanders was introduced from South Dakota into this State—at Ocala, Coleman and Tampa. Thirty cases of glanders were diagnosed at Ocala by the Veterinarian of the State Board of Health. Ten of these animals showed the disease in its incipency by reacting to the mallein test. They were apparently in good condition and showed no clinical evidence of the disease; and the owners, against the *advice* of the State Board of Health, refused to destroy the ten animals. Eventually some of these animals died and some were sold. However, the infection was planted at Ocala and this past July 62 cases of glanders were diagnosed by our Veterinarian.

It is presumed that should this matter be presented to the Legislature for relief in the premises, in 1911, that the claim will be referred to your office for confirmation and information, and it is for that reason I desire these facts to be on record with the accompanying vouchers.

The State Health Officer is of the opinion and firm belief that had the ten horses, diagnosed as afflicted with glanders at Ocala in 1905, mentioned above, been destroyed as advised, that the epidemic, 62 cases, would never have occurred in Ocala last July (1909). Satisfactory evidence has been secured to warrant the belief that the 1909 epidemic of glanders was a sequence of the infection not destroyed in 1905.

Yours very truly,  
(Signed) JOSEPH Y. PORTER,  
State Health Officer."

On voucher No. 10,964, dated Sept. 30, 1909, drawn in favor of Tompkins & Cobb, in the sum of \$750., covering reimbursement for the loss of ten animals, the following statement appeared:

"The payees hereof agree that this payment is in full satisfaction of their individual claims as entered for reimbursement of said animals and other animals described on attached blanks of appraisalment."

# SYNOPSIS OF PREVALENCE OF GLANDERS IN ALACHUA COUNTY, JANUARY-FEBRUARY, 1911

## Officials in charge of outbreak:

Dr. Thomas J. Mahaffy, Veterinarian State Board of Health, assisted by  
Dr. J. G. Burneson of the United States Bureau of Animal Industry.

## History of Outbreak, Source of Infection, etc:

On January 16th, 1911, the Jacksonville office of the State Board of Health, through the veterinarian, was advised by a long distance telephone message from Mr. Lee Hughes, of the Newberry Stable Company, Newberry, Florida, that two cases of glanders had been diagnosed by Dr. A. D. Galbraith in the stables of the said company and that the company had shot and killed the animals. The next morning's mail brought a letter from Dr. Galbraith confirming the telephone message. Dr. Thomas J. Mahaffy, veterinarian of the State Board of Health, then in Jacksonville, was detailed to go to Newberry, and he left for that point on the morning of the 17th of January. On January 19th a telegram was received from Mr. S. K. DuPuis of Trenton, also reporting the occurrence. The letters from Dr. Galbraith and Mr. DuPuis were promptly answered, giving the information that the veterinarian had left on January 17th for Newberry.

Upon Dr. Mahaffy's first visit to Newberry he obtained from the Newberry Stable Company a complete list of those persons and firms to whom they had sold animals from a shipment of three cars of horses and mules from Oklahoma; and the State Health Officer at once wrote to each of these owners, forty-three in all, a letter requiring them to isolate such animals as they had bought from the Newberry Stable Company and to have them in readiness for examination by the veterinarian when he should reach each in turn.

The several owners complied with the request contained in that letter and isolated such animals and also contact animals, until they could be tested.

## Source of Infection:

From information obtained from various parties at and near



Newberry during the prevalence of the disease, the veterinarian ascertained that 76 horses and mules were received at Newberry by the Newberry Stable Company during September and November, 1910, from Miller Brothers' 101 Ranch, Bliss, Oklahoma; that 26 horses and mules were bought by the Newberry Stable Company at the same time, these 26 animals coming from the following points:

- 4 from Punker,
- 8 from 50 miles east of Bliss,
- 1 from 2 miles east of Bliss,
- 2 from 6 miles east of Bliss,
- 3 from Red Rock,
- 6 from Gonzalez Co., (address not known),
- 2 mules from unknown localities;

These were all from Oklahoma, the localities mentioned being in that state. Of the 76 animals particular attention is directed to number 640 (see tabulations attached), which remained in the stables of the Newberry Stable Company for four days after arrival; was sold to a Mr. Hodges and then traded to Mr. W. P. Jones, and infected his animals. No. 640 died February 6th, and a *post mortem* showed evidence of the animal having had glanders for some time. Mr. Jones lost this animal and three others which became infected.

Some of the 76 animals were scattered throughout Alachua county, in eight towns, among forty-three owners, with the exception of one animal which had been sent to Georgia, and a few which had been sold by the first purchasers. Only two of the 76 animals were not located.

It is believed by Dr. Mahaffy that the infection was brought into Florida from the 101 Ranch by these animals. Among the 76 were several circus ponies which had served circus duty for Miller Bros., 101 Ranch, but were returned to the ranch and shipped to Florida.

Regarding the second lot of animals mentioned—26 in number: One of these gave clinical symptoms of glanders when inspected, and others reacted to the mallein test, but it is believed that these became infected from contact with animals in the lot of 76 after arrival at Newberry.

Total number of animals tested with mallein .....	141
Number of animals inspected but not tested .....	14
The fourteen animals just mentioned had not been in contact with any of the infected animals.	
Number of animals reported as killed by owners, Nos. o and oo .....	2
Number of animals dying from Glanders .....	1
Number killed by order of the Veterinarian .....	35

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Veterinarian's Number	Owner and address	Date of death or destruction of animal	Appraised value	Remarks
0	Newberry Stable Co., Newberry	1-16-11	\$ ..	Killed by owner
00	Newberry Stable Co., Newberry	1-16-11	..	Killed by owner
535	Newberry Stable Co., Newberry	1-17-11	150	Killed by order of the Veterinarian
536	Newberry Stable Co., Newberry	1-17-11	300	Killed by order of the Veterinarian
537	Newberry Stable Co., Newberry	1-17-11	160	Killed by order of the Veterinarian
538	Newberry Stable Co., Newberry	1-17-11	135	Killed by order of the Veterinarian
539	Newberry Stable Co., Newberry	1-17-11	150	Killed by order of the Veterinarian
544	Newberry Stable Co., Newberry	1-23-11	100	Killed by order of the Veterinarian
547	Newberry Stable Co., Newberry	2-28-11	125	Killed by order of the Veterinarian
549	Newberry Stable Co., Newberry	1-23-11	225	Killed by order of the Veterinarian
551	Newberry Stable Co., Newberry	2- 2-11	175	Killed by order of the Veterinarian
554	Newberry Stable Co., Newberry	1-23-11	140	Killed by order of the Veterinarian
562	Newberry Stable Co., Newberry	2- 2-11	175	Killed by order of the Veterinarian
566	Newberry Stable Co., Newberry	2- 2-11	210	Killed by order of the Veterinarian
568	Newberry Stable Co., Newberry	1-23-11	175	Killed by order of the Veterinarian
570	Newberry Stable Co., Newberry	2- 2-11	165	Killed by order of the Veterinarian
573	Newberry Stable Co., Newberry	2- 2-11	275	Killed by order of the Veterinarian
574	Newberry Stable Co., Newberry	1-23-11	250	Killed by order of the Veterinarian
583	Newberry Stable Co., Newberry	1-23-11	300	Killed by order of the Veterinarian
587	J. W. Griffin, Newberry	1-24-11	150	Killed by order of the Veterinarian
588	J. W. Griffin, Newberry	1-24-11	100	Killed by order of the Veterinarian
589	Long Lumber & Tie Co., Newberry	1-26-11	150	Killed by order of the Veterinarian
590	Long Lumber & Tie Co., Newberry	1-26-11	275	Killed by order of the Veterinarian
595	Newberry Stable Co., Newberry	2- 2-11	150	Killed by order of the Veterinarian
601	Peach Farm (Cummer Lumber Co., Newberry	2-28-11	75	Killed by order of the Veterinarian
606	Newberry Stable Co., Newberry	2-23-11	200	Killed by order of the Veterinarian
614	Long Lumber & Tie Co., Newberry	2-24-11	..	Died in isolation
617	Long Lumber & Tie Co., Newberry	2- 3-11	325*	Killed by order of the Veterinarian
619	Long Lumber & Tie Co., Newberry	2- 3-11	333.33*	Killed by order of Veterinarian
621	Long Lumber & Tie Co., Newberry	2- 3-11	273.33*	Killed by order of Veterinarian
622	Long Lumber & Tie Co., Newberry	2- 3-11	258.33*	Killed by order of Veterinarian
623	Long Lumber & Tie Co., Newberry	2- 3-11	306.66*	Killed by order of Veterinarian
624	Long Lumber & Tie Co., Newberry	2-28-11	150	Killed by order of the Veterinarian
640	W. P. Jones, Newberry	2- 6-11	150	Killed by order of the Veterinarian
641	W. P. Jones, Newberry	2- 6-11	173.33*	Killed by order of Veterinarian
646	W. P. Jones, Newberry	2- 6-11	200	Killed by order of the Veterinarian
647	W. P. Jones, Newberry	2- 6-11	173.33*	Killed by order of Veterinarian
649	W. J. Studstill, Levyville	2- 8-11	150	Killed by order of the Veterinarian

In appraising the value of the following animals, the appraisers could not agree on a figure, so the value stated by each appraiser was recorded in the claim for reimbursement, and is as follows: The value of these animals as given above is simply an average of the values stated by the appraisers.

Veterinarian's Number	Owner and address	Value given by each appraiser:		
		W. T. Hodges	A. J. Davis	T. J. Mahaffy
617	Long Lumber & Tie Co., Newberry	\$300	\$375	\$300
619	Long Lumber & Tie Co., Newberry	350	350	300
621	Long Lumber & Tie Co., Newberry	300	350	170
622	Long Lumber & Tie Co., Newberry	275	250	250
623	Long Lumber & Tie Co., Newberry	300	350	270
641	W. P. Jones, Newberry	\$175	\$165	\$170
.....	.....	091	221	211

ANIMALS FOR WHICH REIMBURSEMENT HAS BEEN MADE BY  
THE STATE BOARD OF HEALTH

Veteri- narian's Number	Owner and address	Appraised Value	Amount of Reim- bursement
544	Newberry Stable Co., Newberry .....	\$100	\$75
547	Newberry Stable Co., Newberry .....	125	75
562	Newberry Stable Co., Newberry .....	175	75
573	Newberry Stable Co., Newberry .....	275	75
574	Newberry Stable Co., Newberry .....	250	75
589	Long Lumber & Tie Co., Newberry .....	150	75
617	Long Lumber & Tie Co., Newberry .....	325	75
619	Long Lumber & Tie Co., Newberry .....	333.33	75
621	Long Lumber & Tie Co., Newberry .....	273.33	75
622	Long Lumber & Tie Co., Newberry .....	258.33	75
623	Long Lumber & Tie Co., Newberry .....	306.66	75
624	Long Lumber & Tie Co., Newberry .....	150	75
641	W. P. Jones, Newberry .....	173.33	75
646	W. P. Jones, Newberry .....	200	75
647	W. P. Jones, Newberry .....	173.33	75

SUMMARY OF THE ABOVE TABULATIONS

Owner and address:	No. of animals killed	No. of animals paid for	No. of animals not paid for
Newberry Stable Co., Newberry .....	19	5	14
J. W. Griffin, Newberry .....	2	..	2
Long Lumber & Tie Co., Newberry .....	9	7	2
W. P. Jones, Newberry .....	3	3	..
Peach Farm (Cummer Lumber Co.) .....	1	..	1
W. J. Studstill, Levyville .....	1	..	1
Total .....	35	15	20

Two horses belonging to Newberry Stable Co., were diagnosed as glandered and were killed before the arrival of the state veterinarian. One horse belonging to W. P. Jones died about the time of the arrival of the Veterinarian and is mentioned in the tabulation and remarks as No. 640.

In all vouchers covering reimbursement for the loss of animals on account of glanders, it has been a part of the routine of the office to have the following statement included on the face thereof over the signature of the claimant, as instructed by the attorney of the State Board of Health:

"This amount is hereby accepted in full payment and satisfaction of all claims of said....(owner)....against the State of Florida and the State Board of Health of the State of Florida, for the loss, death and destruction of the said animals, and all other claims whatsoever against said State of Florida and State Board of Health, under Chapter 5933, Laws of Florida, 1909."

*Bills for Relief:*

The information contained in the two foregoing statements

concerning the prevalence of glanders at Ocala in 1909, and in Alachua county, in 1911, were submitted to the Senate Committee on Claims.

The following measure was introduced in the Senate of the 1911 Legislature, and enacted into law:

CHAPTER 6163

AN ACT for the Relief of the Newberry Stable Company.

*Whereas*, During the month of January, 1911, an epidemic of glanders broke out at Newberry Florida, and the Newberry Stable Company, in order to help in suppressing the outbreak, and prevent further spread of the disease in the State of Florida, voluntarily killed and destroyed two infected horses to them belonging, both appraised at more than seventy-five dollars each; and,

*Whereas*, During the months of January, February and March, 1911, nineteen other horses were condemned and killed by order of the State Board of Health, to suppress the outbreak and further prevent the further spread of glanders in the State of Florida, which nineteen others were either owned by said Newberry Stable Company or were sold by them to other parties to whom they, the said Newberry Stable Company were responsible, and all of said horses were appraised at more than seventy-five dollars each; and,

*Whereas*, Said Newberry Stable Company cannot recover from the State of Florida, under Chapter 5933 of the Acts of 1909, for the value of said animals so killed, because of the same not having been in the State of Florida for one year prior to their condemnation and destruction; and,

*Whereas*, Said Newberry Stable Company has acted in good faith in said matter, and by their efforts and assistance to the State Board of Health, materially aided in the suppression of the disease of Glanders in the State of Florida; therefore,

*Be it enacted by the Legislature of the State of Florida:*

Section 1. That the sum of fifteen hundred and seventy-five dollars be, and the same is hereby appropriated, and the Treasurer of the State of Florida is hereby directed to pay to the said Newberry Stable Company out of the funds in his hands to the credit of the State Board of Health, in full compensation for said animals so killed for said purpose.

Section 2. This Act shall go into effect immediately upon its approval by the Governor.

Approved June 5, 1911.

It is seen therefore, that this Act provided that the Newberry Stable Company should be reimbursed by the State Treasurer, to the extent of \$1,575, for twenty-one (21) animals belonging either to them or to parties to whom they were responsible, at the maximum allowance under the Laws of Florida, i.e., \$75 per animal for those destroyed by order of the State Board of Health.

The following measure was introduced also at the 1911 Legislature and into law:



## CHAPTER 6149

An Act for the Relief of Messrs. Tompkins & Cobb of Ocala, State of Florida, for the loss of twenty-three horses and mules killed by order of Thos. J. Mahaffy, veterinarian of the State Board of Health and making appropriation therefor.

*Whereas*, On the 27th day of June, A. D. 1909, it was discovered by the State Board of Health that glanders prevailed among the horses and mules at the stables of Messrs. Tompkins & Cobb, liverymen, of Ocala, State of Florida and,

*Whereas*, On the 5th day of July, A. D. 1909, Thos. J. Mahaffy, veterinarian of the State Board of Health, condemned twenty-four head of the horses and mules belonging to the said Tompkins & Cobb, and by authority of law had appraisers appointed, he the said veterinarian, acting as one of the appraisers, and valued twenty-three of the said twenty-four head of horses and mules at the sum of thirty-four hundred and forty-five dollars; and,

*Whereas*, On the 30th day of September, 1909, by order of the State Board of Health the said firm of Tompkins & Cobb was paid by the state, only the sum of seven hundred and fifty dollars of the appraised value of thirty-four hundred and forty-five dollars, the twenty-three head of horses and mules condemned, killed and buried by order of the State Board of Health; therefore,

*Be it Enacted by the Legislature of the State of Florida:*

Section 1. That the sum of twenty-six hundred and ninety-five dollars be, and the same is hereby appropriated to be paid to the firm of Tompkins & Cobb, as the balance due them on the appraised value and sworn statement of the veterinarian of the State Board of Health on twenty-three head of horses and mules condemned and killed by order of the State Board of Health.

Section 2. The Comptroller is hereby authorized and required to draw his warrant on the State Treasurer against the State Board of Health Fund for twenty-six hundred and ninety-five dollars to be paid out of any money not otherwise appropriated, in favor of the firm of Tompkins & Cobb, and the State treasurer is hereby required to pay the same.

Section 3. This Act shall go into effect from and after its passage and approval by the Governor or upon its becoming law without such approval.  
Approved May 31, 1911.

This Act provided that Messrs. Tompkins & Cobb should be reimbursed by the State Comptroller, from the State Board of Health Fund, to the extent of \$2,695, the difference between the appraised value of the twenty-three animals destroyed by order of the State Board of Health on account of glanders, and \$750, the amount paid claimants by the State Board of Health, which, was, as has been stated, the full amount allowed them by Chapter 5933, Acts of 1909. These claims were reimbursed, not at the *maximum allowance* given in Chapter 5933, but at the *appraised value* of the animal, an excess of \$1,720 over that would have been paid them had the law allowed payment for more than ten animals killed in any one year.

The following correspondence, which occurred upon the intro-

duction of this measure in the legislature, between the State Board Officer and Members of the Committees on Claims of the Senate and the House, shows that the facts cited above were known to those committees:

"Jacksonville, Fla., May 6th, 1911.

"Hon. W. H. Malone, Jr.,  
Member, The Committee on Claims,  
The Senate,  
Tallahassee, Florida.

My Dear Sir:

Referring to House Bill No. 178:

"A Bill to be Entitled An Act for the relief of Messrs. Tompkins & Cobb of Ocala, State of Florida, for the loss of twenty-three horses and mules killed by order of Thos. J. Mahaffy, of the State Board of Health, and making appropriation therefor," which I see by the Journal of the House of Representatives for Monday, May 1st, page 32, was favorably reported in the House by the Committee on Claims:

I have written to Mr. Peter T. Knight, a Member of the Committee on Claims in the House of Representatives, asking if it is known to the Committee that of the twenty-three animals killed belonging to Tompkins & Cobb, ten were paid for by the State Board of Health in 1909 according to law; and whether it is realized that under paragraph 3 of section 9 of Chapter 5933, Laws of Florida, 1909, no other animals belonging to that firm, killed during that year can be paid for.

The Attorney-General of the State, at the time this claim came up, decided that Tompkins & Cobb was a partnership and owned the animals jointly; that the claims could not be separated and each member of the firm paid for ten animals. The present Attorney-General made this ruling and it was followed by me in handling the matter.

It is my opinion that in all these matters where claims against the State are being made, where adjudication has previously been made through a Department of the State government, that the executive officer or whoever is in charge of such Department should have had a hearing before the Committee on Claims, else the State will be paying two or three times for the same thing. I have also asked Mr. Knight in my letter to let me know, if possible, whether or not the owners of these animals have stated to the Committee of the House that they have already been paid for ten of the twenty-three animals; and if the matter has yet been brought before the Committee on Claims of the Senate, I would like to be informed if such statement was made to the Committee.

Yours very truly,

(Signed) JOSEPH Y. PORTER,  
State Health Officer."

Copy to Hon. J. C. L'Engle,  
Member of Committee on Claims,  
The Senate,  
Tallahassee, Fla."

A letter similar to the above was also written the same date

to Hon. Peter T. Knight, member of the Committee on Claims in the House of Representatives, to which the following reply was received:

Hon. Jos. Y. Porter,  
State Health Officer,  
Jacksonville, Fla.

"Tallahassee, May 8, 1911.

Dear Doctor:

Your letter of the 6th instant, in relation to House Bill 178, is at hand, and replying thereto will state that the Committee was cognizant of the fact that Messrs. Tompkins & Cobb were paid for 10 of the 23 animals (horses and mules) destroyed.

The Committee on Claims was also aware that under paragraph 3, Section 9, the owners of the 23 horses and mules were not entitled to pay for more than 10 of the animals destroyed.

The majority of the Committee were of the opinion that as the animals were destroyed by order of the State Health Department, the owners were entitled to the relief asked for.

I do not think any of these claims for relief will be passed by the Legislature, for the reason that it requires a two-thirds vote to pass the bill.

Very truly yours,

(Signed) P. T. KNIGHT."

Upon the passage of the special relief bills, and after copies of the two Acts had been obtained from the Comptroller of the state, the following letter was written by the State Health Officer:

"Hon. A. C. Croom,  
State Comptroller,  
Tallahassee, Fla.

"Jacksonville, Fla., June 30, 1911.

Dear Sir:

I am very much obliged for your letter of yesterday enclosing copies of the legislative acts for the relief of Tompkins & Cobb of Ocala, and of Newberry Stable Co., of Newberry.

The situation confronting me in the matter of reimbursement for glandered animals is one that is perplexing and very unsatisfactory. Chapter 5933, Laws of 1909, imposes certain conditions that must be fulfilled, and requires that certain facts shall be established by the owner of the stock in order that reimbursement may be made; and provides "That no more than seventy-five (\$75.00) shall be paid for any horse or mule" killed in accordance with the Act.

The retroactive clause (Section 13) of the Act, was drawn principally that legal reimbursement might be made to Mr. W. J. Cook of Jacksonville for the loss of 63 animals killed by him on account of glanders several months before the passage of the Act. Mr. Cook was paid at the rate of \$75 an animal—\$4,725. It was afterward found, too, that several other persons and firms had destroyed animals for similar reason, after a diagnosis of glanders by the State Board of Health, within two years next prior to the passage of the Act, and these claims were presented to the Board for payment. The majority of this latter class, or those presenting claims under the retroactive clause of the Act have been honored by you.

Under the provisions of the act Messrs. Tompkins & Cobb of Ocala suffered the loss of 23 animals in the summer of 1909—some time after the passage of the Act. Mrs. Tompkins also lost one animal. The question was raised by me whether or not the partnership was to be considered the owner

of the animals; or whether Mr. Tompkins owned a portion and Mr. Cobb a portion of the animals killed; for the law states that no person shall be paid for more than ten animals in any one year. This was all submitted to you and the Attorney-General and the ruling was made that Tompkins & Cobb, as a partnership, owned the 23 animals, and that the individual members of the firm could not be paid for ten animals each; and further, that Mrs. Tompkins should be paid for the one animal owned by her. Therefore, the firm was paid for ten animals, and Mrs. Tompkins was paid for one—at the rate of \$75. for each animal.

Now, Messrs. Tompkins & Cobb go before the legislature asking relief for the loss of 24 animals, and they are paid for them—not at the rate of \$75 per head as the law specifies—but *at the appraised value of each animal*. Of course, the \$750 paid the firm and the \$75 paid Mrs. Tompkins, by the State Board of Health, have been deducted by them from the total *appraised value*. The appraised value of the 23 animals is an average of \$151 each, a total of \$3,475. Deducting from this total appraisement \$825, (\$750 plus \$75) leaves \$2,650, representing the loss of Tompkins & Cobb. By the act of the legislature they are paid \$2,695, based on the appraised value of the animals.

During January, February and March of 1911, the veterinarian in controlling glanders in Alachua county, found that previous to his visit, the Newberry Stable Company had destroyed two animals on account of glanders; and during the course of the epidemic 19 animals belonging to Newberry Stable Company were destroyed by order of the veterinarian; and five animals owned by other parties, but which had just been sold to the owners by Newberry Stable Company, were destroyed on account of glanders. The two animals killed by owners before the arrival of the veterinarian could not be paid for by the Board for they had not been killed by order of the Board or of its representative. The five animals last mentioned above, could not be paid for, because they had not been within the state one year. Of the 19 animals killed, belonging to Newberry Stable Company, only 5 could be paid for, for 14 of the 19 had not been within the state one year.

Therefore, the State Board of Health, in accordance with Chapter 5933, Laws of 1909, could only pay Newberry Stable Company for 5 of the 19 animals. This payment was made them, \$375 total.

The Newberry Stable Company goes before the legislature and gets relief for the 2 animals killed before the arrival of the veterinarian; for the 5 animals which they had just sold to other parties but which animals had not been within the state one year; and for the 14 animals belonging to them which were killed but which had not been within the state one year; all at the rate of \$75 each: 21 animals at \$75.—\$1,575, the sum the legislature voted them.

Now, if the Newberry Stable Company is to be reimbursed at \$75 per animal, why should not the same apply to Tompkins & Cobb; or vice versa, if Tompkins & Cobb are to be paid at an average appraised value (in their case \$151.08), why shouldn't Newberry Stable Company be paid for their 21 animals at the appraised value (the 19 animals which the Board killed were appraised at an average of \$187.36, a total of \$3,560.)

The law distinctly states that owners shall not be paid for animals destroyed by the Board unless the animal shall have been within the state one year; and further, that no one shall be paid for more than ten animals in any one year; and further, that no more than \$75 shall be paid for any one animal. that no one shall be paid for more than ten animals in any one year; and further, that no more than \$75 shall be paid for any one animal.

Of course, the legislature can pay a thousand dollars a head for these animals, if it so will; but it does seem to me that in enacting the two relief bills cited, the legislature has practically nullified sections 9 to 13 of the act of 1909.

Therefore, it is my decision, unless I am instructed otherwise by higher



authority, hereafter, not to approve or pay any claims for glandered animals; the matter of reimbursement will be left entirely with each legislature.

If it is proper for the legislature to pay Tompkins & Cobb at the appraised value for 24 animals, certainly it would be considered due Mr. W. J. Cook that he be paid for 63 animals killed in 1909, at their appraised value. It was in Mr. Cook's interest, I am informed, that the retroactive clause of the bill was added as an amendment after the original bill had been introduced in the 1909 legislature, and I therefore consider it a grave injustice to Mr. Cook that he has not been paid upon the same basis as has Tompkins & Cobb. This applies equally, also, to Mr. J. T. Jones of Lake City, Mr. C. C. Odom of Providence, and all other persons who have been reimbursed by the State Board of Health for the loss of animals killed in accordance with the law.

Previous to the adoption of Chapter 5933 by the 1909 legislature, and before my receipt from the secretary of state that year of a certified copy of that act, I was unacquainted with the provisions, requirements or terms of the act. It never had my approval before its introduction, or before its passage (for I had not seen it), and I am now, and always have been, opposed to the provisions so far as they relate to reimbursing owners at \$75 each for worthless glandered horses and mules. I never did feel that the appraisement required by the statutes had anything to do with the amount of reimbursement, but I do believe that the appraisement is confusing, and, in my opinion, suggests to owners subsequent relief upon application to succeeding legislatures.

Very truly yours,  
(Signed) JOSEPH Y. PORTER,  
State Health Officer."

A copy of the above letter was sent to the Governor, to the President of the State Board of Health, and to the attorney of the State Board of Health, whereupon the State Health Officer was informed that the original statute (Chapter 5933) would have to be followed by him in reimbursing persons who lost animals on account of glanders, and that these special relief statutes do not have any bearing upon the general statute.

The State Health Officer has never favored a payment or reimbursement for live stock destroyed on account of communicable diseases. Especially does he consider this objection a valid one, when in the case of glanders, the opportunity is so baldly offered to dishonest horse dealers to bring into the state animals which have contracted this disease in other states, but in which animals the trouble will not or does not become apparent and distinguished for several months after their importation. Again, why should the state pay for a glandered horse any more than for a valuable dog which has unfortunately been bitten by a rabid cur and thus infected with rabies? As a matter of right and wrong there can be but one opinion on this subject, and perhaps the only argument in favor of the state paying for glandered animals is one of policy: to prevent secreting the animals and spreading the disorder. But

the law should be uniformly and unvaryingly administered and not capriciously juggled with, so that the Executive Office may not receive censure for adhering to the requirements of the General Statute bearing on the subject.

## THE EXECUTIVE OFFICE

This recital to you of the incidents of the year in health matters would not be satisfactorily nor pleasingly complete if mention was not made of the valuable co-operative assistance which the executive officer has received from each and every member of his official family, in the prosecution of ways and means devised for the betterment of the health of the people or for efficient and business-like methods of clerical management of accounts and correspondence. Each and every one connected with the State Board of Health in the executive office and elsewhere, has honestly and earnestly tried to do his and her full duty and to measure up to the requirements of the position held. The executive officer can speak decisively for those under his immediate eye and supervision, and he believes that elsewhere in the state, where important duties have been entrusted, that due energy and faithful regard to the responsibility of the occasion has been felt and fulfilled.

To individualize upon the merit of work performed by any particular professional or clerical assistant would be unfair if not impossible, because each one has considered the success or defeat of the methods outlined, to be his or her own triumph or defeat, and with this aim kept constantly in mind it can be seen that with the best efforts put forth success must be assured. Therefore, it is not only due but is a great pleasure for the State Health Officer to commend to you in this public way the faithful and conscientious discharge of duty and the zeal and earnestness with which that duty has been shown by each of his colleagues and by the office associates, among whom "there is no contention, but that noble contention, or rather emulation, of who best can work and best agree."

## NECROLOGY

DR. WALTER WYMAN

During the year the ranks of the workers in the field of sanitation, both abroad and at home, have been depleted by the Grim Reaper, and it is deplored that the thought which labored for the good of humanity and the tongue which taught divine principles of Christian philanthropy in counselling and advising for the public health should be forever stilled, yet the influence of such lives are and will be seen for ages on the foot-prints of time and felt by successive generations. Among those who worked for the public weal there stands out in the national life and light none more brilliant than Walter Wyman, the late surgeon-general of the United States Public Health and Marine-Hospital Service. His untimely death while yet in the meridian of life and at a time when public health matters seemed to be more than ever before engaging the thoughtful attention of reasoning men, was most distressing and regretful. Dr. Wyman was a man whose academic acquirements had been fully developed and whose professional ability could not be challenged, and by reason of long service in a particular and especial line of work, and his executive ability, was pre-eminently qualified to administer and direct a service requiring peculiar qualifications and attainments. He died in harness and although suffering untold agony throughout his brief illness, he held the control of his important office until death silenced the brain and withdrew the guidance.

To those who were permitted to see Dr. Wyman other than the official, a study of character was presented both interesting and pleasing: a kindly heart within the breast of a strict disciplinarian. A man of indomitable perseverance, who knew no such word as defeat when conscious of the rectitude of the case he was espousing or the principle for which he was waging the fight.

By his personality and engaging earnestness in pleading for health measures or for the improvement of or in advancing the interest of his Corps, he carried into his argument with Congress as a body, and the individual members thereof, a conviction of the soundness of his arguments, which invariably met with thoughtful consideration.



The relations of the State Board of Health of Florida and of your executive Officer with the Public Health and Marine-Hospital Service under Dr. Wyman's administration and management has been most cordial and co-operative. Attentive to all requests and considerate of every recommendation made in behalf of maritime medical supervision in Florida, or for aid in prevalence of diseases whose spread or introduction from without the state embarrassed the Florida health authorities, the State Health Officer desires to lay this tribute of grateful remembrance and thankful appreciation on the bier of him whom he had the pleasure of knowing well in life and cherishing as a friend.

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DR. WARREN E. ANDERSON, DR. R. C. WHITE AND DR. J. FRANK CURTIS

During the past year, and coming closer home, from our own ranks and from our own official family, three have been summoned to the Great Beyond. They, too, died in harness, two in the noon-day of life when the sun is at its meridian height and the other at the closing of the day when the shadows lengthen and darkness comes on.

Dr. Warren E. Anderson, formerly a member of the State Board of Health, and the representative of the Board for Escambia county, died February 1st, 1912, after weeks of agony and physical suffering, but until pain and disease clouded his brain, he never lost interest in or anxiety for the affairs of life which he in his official capacity was especially charged to supervise. A manly man, a broad minded man, a man charitable in affairs of the heart as well as purse, a man whose intellect was ever acute in the calls of humanity and in everything tending to the betterment of the community in which he lived; a man of firm conviction of duty and of right, who could not be swerved by popular clamor of disapproval when he felt his right, nor coaxed from the beaten path of duty by the plaudits of loving and devoted friends. The state has lost a valuable citizen, the State Board of Health an ardent, enthusiastic helper in the vineyard of sanitary development, and the writer a sincere, personal friend. A friend of whom it is well said

Who heart-whole, pure in faith, once written friend,  
In life and death are true, unto the end.

The memory of that affection, loyal friendship and conscientious assistant who gave his thought and defence freely when needed, will remain in the heart of him who pens these lines, cherished and valued until he too shall sleep that peaceful sleep which knows no waking here, for

"Tis sweet as year by year we lose  
Friends out of sight, in faith to muse  
How grows in Paradise our store."

On the 14th of February, 1912, Dr. R. C. White, Acting Assistant Surgeon in the Public Health and Marine-Hospital Service, Quarantine Physician at Santa Rosa Quarantine Station, near Pensacola, passed from earth and a long life of great activity in public health matters, both for the State of Florida and the United States. Although at an advanced age, he was, up to a few months of his death, vigorous and energetic in the discharge of the duties of the position held under the Government, personally attending to the smallest detail of quarantine work. Conscientious and thorough to the minutest items of management, he was well known to ship masters all over the world because of this peculiarity of temperament and character, and for quarantine discipline he was perhaps better known than any other quarantine official in this country. Strong in his friendships for those whose opinions he respected, he was nevertheless equally as relentless against others whom he thought sought to endanger the public health by evading certain requirements of quarantine management which he considered essential for the protection of public health.

After a long and useful life spent in his Country's service, his friends and family can well speak of him and of his memory, as "Well done, good and faithful servant."

## RECOMMENDATIONS

From the foregoing text it is easily perceived what should be the nature of recommendations submitted at this annual meeting, looking to the betterment of the health of the people of the state in the future, for the consideration of yourself and of your colleagues. It is recommended:

First, that the Board set its seal of disapproval on the future and further use of the word *quarantine* as applied to the spread or suppression of communicable diseases. In this enlightened age quarantine means absolutely nothing in the manner or way of management of disease. In the dim and misty past, the sixteenth and seventeenth centuries, it was the custom to hold vessels—and the word was then used principally in connection with maritime supervision and detention of shipping supposedly infected with contagious disease—for forty days, because it was held in those days that the contagion of disease would not live longer than that period. Nothing was then done except to hold the vessel and passengers for that length of time, at the expiration of which both the vessel and passengers were set free. In the light of recent scientific investigation we know that detention plays but a minor part in the suppression of disease or the prevention of its spread. Take yellow fever for instance—a disease nearly extinct on the Western Hemisphere—the precautions against spread and transmission are directed not so much against the sick individual as to a destruction of the transmitter of the infection, and to prevent the sick individual, by proper and effectual screening during the first three days of illness, furnishing the poison to the mosquito to be in turn metamorphosed into something which we only know as a filterable virus and when subsequently injected into a non-immune person will produce an attack of yellow fever. Under a mosquito net and in a mosquito-proof screened room, a yellow fever patient need not be held for forty days—quarantined; in fact, need not be withheld from the public after the first five days of illness.

Has holding smallpox patients for forty days ever controlled or prevented smallpox from spreading? Quarantining, so-called, means placing of guards to inhibit patients from leaving homes and houses. The experience of the Executive Office has been that guards have been in the past, generally incompetent, and in several instances in the early days of the Board's management of smallpox.

where this practice was resorted to, additional guards had to be employed to watch the initial guard placed over the smallpox patient. The practice is costly and avails nothing in the way of protection to the public, because a smallpox patient, if, only slightly ill, wishes to leave the house, he can do so at pleasure, for the guard would have no authority to shoot and thus commit murder, and everyone knows no attempt to restrain by physical force would be exercised for a guard will not grasp or hold a person covered with the sores and scabs of smallpox. What folly, what nonsense, to rely upon such broken reeds for protection!

What has been said about the employment of so-called quarantine in smallpox and yellow fever, can be applied to the management of the other communicable disorders with equal significance and verity. Therefore, let the guard be excluded from the vocabulary of preventive measures which the State Board of Health of Florida adopts to prevent and control the spread of dangerous diseases communicable through a special germ or parasite.

Second, that the indigent of the state may be afforded a protection against typhoid fever, and to this end and to accomplish this worthy object, the Executive Officer to be authorized to furnish free of charge anti-typhoid vaccine to those citizens of the state who may apply for the same, in the same manner as the Jenner vaccine is now distributed.

Third. In order that the State Board of Health may obtain a comprehensive idea of the area of malarial infection in the state, and thus be better provided with information which can be used to the advantage of the people in an educational campaign against this disease, it is recommended that the State Health Officer be authorized to organize a corps of workers who shall prosecute this endeavor on the part of the Board to improve the physical welfare of the citizens of the state. It is believed that with malarial fever and hookworm disease reduced to a minimum in Florida, the vigor of the people will increase and the mental strength and intellectual potency of the citizenship of the state will be so markedly increased that, aside from the lessening of sickness and physical discomfort, the economic side of the question will be so apparent in enhanced healthfulness of the state as a whole that the cost of carrying on this investigation will be returned to the people many times over.

Fourth. In addition to the above recommendations which are all important in the eyes of the State Health Officer, there is yet



another which deserves the serious thought and consideration of the Board at this time. Reference is made to medical inspection of schools. It is believed, that acting with the State Educational Department, the State Board of Health should authorize the State Health Officer to inspect the schools in the state, with particular reference to construction of buildings and accessories needed for health and comfort; and to likewise give attention to the pupils with a view of determining the physical condition of each; whether defective in hearing or seeing, abnormal in development, infected with tuberculosis, hookworm disease or malaria; and then to submit, through the principal of the school, to the school board of the county, such recommendations as will correct faulty construction of buildings, or a lack of as well as improperly contrived privy facilities for the sexes. Then, in the same manner and through the same channels, to inform the parents of physical defects of the child, with advice for correction. It is believed that the parents and patrons of the schools in the state will appreciate this effort on the part of the Board to initiate measures which will tend to increase the physical and mental vigor of the growing child, and to inhibit conditions in early life, which, if not controlled or an attempt made to do so, probably afterward will cause distress and perhaps permanent invalidism later on in life.

Respectfully submitted,

JOSEPH Y. PORTER.  
*State Health Officer.*

## REPORTS OF ASSISTANT STATE HEALTH OFFICERS

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DR. HIRAM BYRD.

DR. C. T. YOUNG.

DR. E. W. DIGGETT.

DR. H. P. NEWMAN.

## REPORT OF DR. HIRAM BYRD

JACKSONVILLE, FLA., January 1, 1912.

*Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.*

DEAR DOCTOR: I have the honor to hereby submit a brief report of my work for the year 1911.

The greater part of my time has been employed in the office, where I have assisted in answering routine correspondence and in the general conduct of the Executive Office work. I have also assisted in the editing of the *Health Notes*, and have prepared for publication special bulletin No. 88, "Typhoid Primer."

I have in addition to the office work, spent an average of one day a week in the field, serving in a variety of capacities, such as investigating smallpox, poliomyelitis, typhoid fever, malaria, alleged sanitary nuisances, lecturing, inspecting vessels, and, in the absence of the veterinarian, have even had the management of two outbreaks of glanders.

### *Dade County Isolation Hospital.*

At the spring term of the circuit court the Dade County Grand Jury in its presentment arraigned the management of the Isolation Hospital of the Board of Health in that county, whereupon I was detailed to make an investigation, the result of which forms the subject of a special report herewith submitted.\*

### *Typhoid Fever at Belleair and Tampa.*

In the spring of 1911 a number of guests who had spent some time at the Belleview Hotel, Belleair, developed typhoid fever after returning to their various homes in the north and west, whereupon the management of the hotel engaged the services of Drs. Jordan and Irons of Chicago to investigate, with a view of determining the source of infection and correcting it. Dr. Irons, after spending some time at Belleair without determining the source of the infection there, got on the track of some cream that had been shipped by the Tampa Dairy Company to the hotel, whereupon he followed it to Tampa, and after investigating the situation there, arrived at the conclusion that a certain dairy in Tampa was responsible for the typhoid fever at The Belleview. This became known in Tampa and rumors became widespread there and throughout the

\* See Appendix.



state that there was a milk epidemic of typhoid fever in Tampa, whereupon I was detailed to make an investigation, the result of which forms the subject of a special report herewith submitted.\* In this connection, I wish to call your attention to the following features:

First. I was unable to get a shred of epidemiological evidence to indicate that typhoid fever in Tampa was milk borne; and, Second. The evidence that it was fly-borne was overwhelming.

I, therefore, had occasion to review the work of Drs. Jordan and Irons, and my conclusions were diametrically opposed to theirs. In as much as they have published their investigations under the caption: "Three Outbreaks of Typhoid Traced to Milk Infection,"\*\* (this being cited as one), I would beg a careful reading of my report, of which theirs forms a part, that you may the better determine for yourself whether the evidence convicts or exonerates the milk as a causative factor in the epidemic of typhoid fever, both at Tampa and Belleair.

#### *Prevalence of Malarial Fever:*

The office is frequently asked about health conditions at various points in the state with special reference to malaria. From the number of inquiries of this kind, it would seem the impression is abroad that malaria is very prevalent in the State of Florida. In the absence of mortality and morbidity statistics, it is impossible to answer this question except in a more general way and without any adequate idea to base such statements upon.

Now it is found in malarial countries that a certain number of people carry latent malarial parasites in their blood. This is particularly true of children. The more malarial the community, the larger the percentage of the children in health who will be found to be carrying this parasite. Thus it happens that a series of blood examinations of native children to determine how many have latent malarial parasites, forms a fairly good malarial index of a community.

A year ago I undertook to make a series of such examinations. I have had to do this only at odd times and at such places as other duties chanced to take me; accordingly only a beginning has been made.

\*See Appendix.

\*\*Jour. Amer. Med. Assn., Chicago, Jan. 20, 1912, v. LVIII, pp. 169-172.

A preliminary report upon this work was presented to the State Medical Association,\* to which report a few examinations have been added, and is herewith submitted as a special report.\*\*

#### *Committee on Sanitation and Public Health.*

Nearly a year ago the State Superintendent of Public Instruction appointed a Committee on Sanitation and Public Health for the schools of Florida, of which he did me the honor to make me Chairman. The results of investigations of this Committee have been largely incorporated in an address before the State Conference of Womans Clubs, and the recommendations in a special report to the State Educational Association, both of which are herewith submitted.†

#### *Policies in the Management of Communicable Diseases.*

In addition to these special reports it is pertinent that I should make some observations upon certain of the policies of the State Board of Health respecting the communicable diseases in general and certain diseases in particular.

#### *Quarantine.*

As office assistant it has been my province to meet face to face all the communicable diseases encountered in the state; to study their epidemiology; to try out the accepted theories as to management; and to explain the failures, which, I regret to say have been uncomfortably numerous.

It is my purpose to specify in this connection some of the failures, and the wherefores, with the view of, as far as possible, adjusting the machinery between expenditures and results, so that each dollar expended in the interest of the public health will be expended to best advantage; for it is a belief of this office that only one thing in the world justifies expenditures in the interest of public health, and that is *results*. It is a further belief that all public health moneys should be expended so as to produce maximum results. I want to elaborate this just a little for it is one feature that is perhaps most frequently lost sight of even by business men. Remember,, first of all, that the primary object of a health depart-

\*Preliminary Report on Latent Malaria Carriers, By Hiram Byrd, M. D., Jacksonville, Fla. Assistant State Health Officer. In Transactions of the Florida Medical Association for the year 1911. pp. 103-104.

\*\* See Appendix.

† See Appendix.

ment is to prevent sickness and premature death.. That is the thing to be reckoned as results,—nothing else. If it fails there it has no excuse for existence.

All health departments have less money than they could use to advantage. Hence it behooves them to expend it where most needed and where it will do most good in preventing sickness and death. If a thousand dollars expended on trichinosis will prevent one death, and a thousand dollars expended on hookworm disease will prevent a hundred deaths, where should the expenditure be made? That is the true test in all public health management. *Expend all moneys where they will do most good* should be the policy of every board. To expend money where it does not do the most good is not only a waste of money but it is a wanton waste of human life—it permits two to die of this disease to save one from that.

Measured by the amount of sickness they cause, and the number of deaths, we have in this state four major diseases: tuberculosis, hookworm, malaria, and typhoid fever. The others are of very minor importance compared with these. To be sure, there are yellow fever, bubonic plague and Asiatic cholera, that might be introduced at any time and would become veritable scourges for the time, but two of these possible diseases we have never had as yet, and we are pretty well fortified against the introduction of all three. Our operations are therefore largely confined to those that are forever with us, but ever maintaining a watchful attitude toward the others. And as before stated, of those with us there are two groups; a major group consisting of the four diseases mentioned, and a minor one consisting of all the rest.

The funds of the Board have been expended in maintaining an Executive Office, and a field force for the investigation and management of communicable diseases, and a system of laboratories to aid in diagnosis, and a system of publications to educate the people along public health lines, and a system of lectures to push the education still closer home; and this is, after all, the place where the Board reaches its maximum of usefulness. These are the things that are of permanent value.

But in addition to this, and in addition to the diseases of domestic animals, the Board has expended money in three other directions, namely:

*Therapeutics:*

The treatment of hookworm disease has been continued. This is one

of the major diseases encountered in the state and until its ravages are checked, we can never have a high state of public health. Results of treatment are fairly satisfactory, and it is believed that money expended in this work yields handsome returns in improved health.

*Immunization:*

Against smallpox, hydrophobia, diphtheria and tetanus. These are all minor diseases, but the best money ever expended in the interest of public health is immunization money. It yields greater returns, dollar for dollar, in the prevention of disease and premature death than anything else.

One of the major diseases, typhoid fever, is now on the list that can be prevented by immunization, and it is hoped that the Board can see its way clear to authorize it.

*Hospitalization:*

Only two diseases have been hospitalized during the year, or rather partially so, namely, smallpox and leprosy.

*Note*—Quarantine, in the sense that guards are employed, has long since been abandoned. Persons suffering from quarantinable diseases are subject to prosecution after they recover if they have violated the regulations of the Board, and should be reported to the prosecuting attorney by any one having cognizance of the fact. This is a legal quarantine, and if not observed, is to be treated as any other infraction of law.

Guard service in the management of smallpox was discontinued about eight years ago. It was upon the falling tide. Smallpox runs in tides some ten or twelve years apart. We had a gradually rising tide from 1895 to 1900 when it reached its maximum, then gradually fell to 1909 when there were only 24 cases in the entire state for the year. In 1910 it started on an upward sweep again reaching its maximum so far in 1911. It is believed that it is on the decline and that during the year 1912 there will not be as many cases as last year. *It is not to be overlooked that guard service was discontinued about 1902-4, and still the prevalence of smallpox subsided, reaching low ebb five years after guarding had ceased.*

I have pointed out that smallpox is one of the minor diseases in this state. That statement must needs be somewhat amplified. Last year (1911) there were 482 cases at the Anti-vaccination Hospital near Jacksonville. Of these only two died. Had it been 482 cases of measles there would have been at least eight or ten deaths; in 482 cases of whooping cough there would have been at least fifteen or twenty deaths; and yet no one thinks of these as serious maladies; no one thinks of quarantining them. The year was the heaviest smallpox year in the history of the state, and yet the total number of deaths in the entire state from the disease, was less than the deaths from whooping cough in a single city. I repeat, that measured by the amount of suffering or the number of deaths that it causes, smallpox cannot but be grouped with the minor diseases of the state. I am not forgetful that a severe case of smallpox causes untold agonies, even death, but at the same time, it is to be remembered that for one such case there are some fifteen or twenty cases that suffer very little, never



go to bed, never call a physician, never suspect that they have smallpox at all.

And herein lies the weakness of isolation. It is easy to say "Isolate all the cases and that will stop the disease." It is true. Isolation of all the cases would stop the disease.

But before they can be *isolated*, they must be *found*. And no system yet devised has succeeded in finding more than about one-half the cases. Isolate these ever so carefully, but the disease still spreads, because one-half the cases are at large with no restrictions whatever thrown around them.

The difficulties in the way of finding all the cases of smallpox are of three kinds:

1. Failure on the part of the attending physician to diagnose the disease.
2. Failure on the part of the patient to call a physician.
3. Secreting the disease to keep from being quarantined.

It is no reflection on the physician that he fails to see smallpox in the benign eruption that often presents itself to him. Even those with most experience often fail. No longer ago than this week,\* the attending physician, the City Health Officer of Jacksonville, the State Health Officer, and myself, all saw a certain patient, and all made the same mistake in diagnosis. There is another disease so like smallpox that no amount of knowledge or experience will enable the physician to always distinguish with certainty which it is, smallpox or chickenpox.

Besides, it is during the first two or three days of smallpox that the mild cases suffer most; it is during these two or three days that he calls a physician if he calls one at all; and during these two or three days the eruption has not shown itself. This is no inconsiderable source of error.

But more frequently the patient never calls a physician. He assumes that his sickness is transient and that he will recover, and that decides him not to call a doctor at all. These cases are of course, never reported.

Then a considerable number of cases wilfully and maliciously conceal the fact that they have the disease, in order to keep from going to the pest house or being quarantined. I have found cases in hiding many and many a time; found one case concealed in the house between the mattress and springs; found one case in the attic;

\*Jan. 23, 1912.

have found them slipping from house to house; have found them in the swamp; have found them in the barn. They could be prosecuted, perhaps, but that would not undo the damage already done.

So the man of practical business sense asks and asks again what good it does to quarantine half the cases while the others go scott free. The only thing that can be said in defense of such a hit-and-miss procedure is that the people expect it and won't be happy without it. They expect it because it has always been done. And it is done because they expect it. Here is, then, as we say in medicine, a vicious circuit. It is the line of least resistance. It is easiest to follow. But the question is: Do results justify it? Is it expending money to best advantage? Or is it sacrificing two lives there to save one here?

The answer to that question is not far to seek. There are three eruptive diseases that are very parallel: smallpox, measles and scarlet fever. They are transmitted, so far as we know, in the same way; they are about equally contagious and in the past have been about equally virulent. An equal number of cases in the state now would be followed by an almost equal number of deaths, measles perhaps giving the greatest number and smallpox the smallest. For all practical purposes the diseases are fairly analogous. It is about equally difficult to diagnose all cases in one as in another of the three. There are as many mild cases in one as in another, as many cases that go unrecognized and consequently always spread the disease.

Barring vaccination in the case of smallpox, the difficulties attending the control of one are about the same as those attending the control of the others. But, in point of management, the three diseases have been managed along three different lines. Vaccination has influenced the management of smallpox, scarlet fever has always been quarantined, and measles has been quarantined at some times and in some places. Here we have, then, three diseases, in all epidemiological characters exactly alike, but all of which have been managed along different lines. This gives us a complete line on the efficiency of any of the three methods of management. We have only to compare the results of one management with the results of another, and we can see exactly what the management has amounted to. We can compare the most efficient quarantine possible, as in scarlet fever, with no quarantine at all, as in measles, and see just how much or how little good quarantine does.

Let us see, scarlet fever is quarantined throughout the state. Measles is not quarantined at any point in the state. The net results are that *so far as we are able to judge from the incomplete returns, and from all other available data, the one is just about as prevalent as the other.* At times this one is in the ascendency, at other times that one. In places the one, in other places the other. In spite of scarlet fever being quarantined (very poorly, I admit, but the best possible), it is as prevalent as measles. In spite of measles going scott free, without any restrictions whatsoever, it is no more prevalent than scarlet fever.

Then, in the name of High Heaven, what good does quarantine do?

And what is true of quarantine against measles and scarlet fever is equally true of quarantine against smallpox and whooping cough.

But I am not through with quarantine. It has yet graver fallacies to answer for. It seems to be looked upon as the *sine qua non* in public health circles. When the people get frightened, the first thing they think of is quarantine. It makes no difference whether the disease be contagious or not, it must be quarantined. One State Board of Health has even quarantined pellagra, notwithstanding that there is not a shred of evidence that the disease is contagious.

If some check is not applied to this indiscriminate and illogical demand for quarantine, quarantine, regardless of what good it does, the Lord only knows where it will end. In New York a woman is quarantined for some years because she is a typhoid carrier. Doctors Lumsden and Anderson, of the United States Public Health and Marine-Hospital Service, in a recent publication,\* estimate that there are 490 such carriers in the District of Columbia. If this estimate is correct, which it doubtless approximates, there then are some thousands of typhoid carriers in New York, going around loose, and one poor Irish cook quarantined. But that isn't all that comes from that great medical center. Dr. Flexner has found that a child suffering from infantile paralysis has in his nose certain secretions that injected into a monkey will produce symptoms of the disease. *Ergo*, the disease must be quarantined, and for

\*Bull. No. 78, Hyg. Lab., U. S. Pub. Health and Mar.-Hosp. Serv., Wash., 1911. Report No. 4 on the Origin and Prevalence of Typhoid Fever in the District of Columbia, by L. L. Lumsden and John F. Anderson.

six weeks every child with infantile paralysis must be quarantined, in spite of the fact that in 140 cases studied in Santa Clara Province, Cuba, no two cases occurred in the same family, and in spite of the fact that there no quarantine restrictions were resorted to; and in spite of the fact that it is one of the epidemiological features of the disease that only one case occurs in a family—a characteristic which has been observed by every man that has any first-hand information on the subject, and one to which there are few exceptions.

When such examples are set in such centers of learning as in New York, no wonder they are hard to combat in other places. No wonder Shreveport quarantines against Dallas because of a disease the contagiousness of which is affirmed by the bacteriologist but whose epidemiological characteristics vehemently deny it! No wonder George Rosset is shuttle-cocked back and forth from Maryland to Pennsylvania, until finally he dies in West Virginia, trying to get to where he can be taken care of, just because he has a disease that, if contagious at all, is so slightly so that the medical world cannot agree upon it.

The great and fundamental difficulty lies, it would seem to me, in the fact that bacteriological considerations are allowed to crowd out epidemiological evidence. If the bacteriologist says a disease is contagious, it must be so, epidemiology to the contrary notwithstanding. Witness, infantile paralysis. I would not be understood as decrying bacteriology. No one more appreciates its very great value than I do. The man who created the science of bacteriology was Louis Pasteur, and in that he did more for the world, to my mind, than any other individual that has ever existed. But what I would raise my voice against is the total disregard of epidemiological evidence in the management of disease.

Back now to smallpox. It has been seen that quarantine does no good. When that is manifest, is it not time to abandon it?

Fortunately, we have something else that does do good. We have something that prevents the disease. We have vaccination, but some people object to vaccination. Such will have to take their chances with the disease, just as they have to take their chances with scarlet fever and measles. The two courses are open to them. In measles and scarlet fever there is no choice but to take their chances and blame their luck if they lose. But in smallpox they have the alternative of vaccination, and then if they lose blame the choice they made.



But there is a more serious obstacle to getting the people vaccinated than opposition, and that is inertia. Many people would get vaccinated but for the fact that they simply put it off until the disease gets closer, little dreaming that they might themselves be the victims.

I believe with all my heart and soul that such people should have the protection that an open policy will give them. They should know how close the disease is to them. They should know each day that there are so many cases of smallpox in the city. It should be a matter of public record. It should be given out just like yellow fever information was given out during its prevalence. Such a policy would cause temporary disturbance, but it would soon pass away, just as it did with yellow fever. Then those who get the disease would do it with their eyes open. Such a policy would, in my opinion, go further to control the disease than anything else within the range of possibility.

#### *Plague:*

Last year the State Health Officer in his Annual Report emphasized the need of making preparations betimes against the introduction of plague. He did not expect any revolution to take place as the result of this emphasis, but he did want to go on record as having sounded the warning note while it was yet time.

It should here be added that there is no known disease the introduction of which would be so disastrous to the state of Florida. Some fourteen years ago it was introduced into California and got anchorage among the Chinese population. Then among the rats and then among the ground squirrels. There has already been a fourteen-year battle against it, but the end is not in sight. Though some years have elapsed now since a human being is known to have died from it over there, still occasionally a plague-infected rat, and occasionally a plague-infected ground squirrel, is found, which shows that the disease is still there and that it would again spring into activity any time their efforts to exterminate rats and ground squirrels are slackened. This fight will have to be kept up at enormous expense until no more infected rats and no more infected ground squirrels are to be found, and then until the people are sure there are no more. For if they stop while there is one, that may be the spark that will set the fire going again as bad as ever.

It is unlike yellow fever. That stops here at the end of the season. It is doubtful if it has ever been carried through a winter in the United States. It depends for its existence upon a new introduction each year. Plague, on the contrary, once it gets anchored, will be here until exterminated which, with our rodents distributed as they are, will require at least several years.

Nor is this danger merely a chimerical one. The disease is endemic in the far East. Step by step it has crossed the Pacific and reached California. Step by step it has crossed the Atlantic and reached South America, even coming so near us as Trinidad. Our commerce is increasing. The Panama Canal will add tremendously to it. It will likewise add to the danger. Dr. Dyer, President of the Southern Medical Association, emphasized this danger in his address to the Association at Hattiesburg, Miss. Dr. Guiteras, Director of Health of Cuba, holds plague as one of their most imminent dangers.

The Assistant State Health Officer would not emphasize this were it not an economical proposition aside from the public health importance. He is fully aware of the danger, but at the same time he is aware that while plague is yet a long way off it is not likely to cause any great fright, and that no activity in the way of preventing it is going to take place until the people get frightened. But the rat is ever with us and costs more money each year in economic losses than it would cost to exterminate him, to say nothing of the protection that it would be to the public health. For economic reasons alone the expenditure would be justifiable. For public health protection, we cannot afford to longer delay a campaign against the rat.

#### *Infantile Paralysis:*

This disease has assumed proportions in the country that are calculated to disturb the equanimity of the anxious parents that know of it. Apparently it is on the increase throughout the land. Not much has prevailed in Florida, but quite enough to make us aware of its existence and to get close to the heart of many.

The most serious phase of it is that there is apparently no way of checking it. Much has been learned about it, but much remains to be learned. Much of that which has been learned may or may not be of practical value. For instance, it has been found that the nasal secretions from a case of infantile paralysis contain something

that injected into a monkey will produce symptoms of the disease. Hence the bacteriologist looks upon it as contagious and recommends that it be quarantined. But, on the contrary, the epidemiologist notes that it is a rare thing for more than one case to occur in a single family, which would indicate that it is not contagious. For example, Drs. Lebredo and Recio found in Santa Clara Province, Cuba, of 140 cases, not in a single instance was there more than one case in a family. Last year 146 cases were studied in Washington (state). In only eight instances were there more than one case in a family and in no instance more than two. These epidemiological facts protest loudly against a rigid quarantine in the disease.

Where the disease has appeared in Florida we have not advised quarantine, because it is impossible to carry it out, and because the epidemiological evidence will not warrant any such procedure.

We would recommend, however, that where the disease exists in the family that all inmates spray the nose twice a day with peroxide of hydrogen solution, using one part of commercial peroxide to two parts of water.

This procedure is based upon Flexner's testimony that he could rub the nasal mucous membrane of a monkey with the nasal discharge of a patient, and then spray it and prevent the disease developing. Further than this, the office does not feel justified in instituting any special procedure with the object of intercepting the disease.

Respectfully submitted,  
HIRAM BYRD,  
*Assistant State Health Officer.*

## REPORT OF DR. C. T. YOUNG

PLANT CITY, FLORIDA, January 1, 1912.

*Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Florida.*

DEAR DOCTOR:— I have the honor to submit herewith my report as one of the Assistant State Health Officers for the year just ended.

In order that valuable space may not be taken up with a lot of uninteresting matter dealing with a series of details concerning diseases about which a great deal has been written from time to time, I have condensed and tabulated the work into as brief form as possible.

The period but recently passed has been one of the most pleasant spent in the service of the State Board of Health. The revised attitude in the control and management of smallpox, the bold submission to the people the fact that vaccination, and that alone, prevents this disease, has contributed more than any one other factor to this feeling. The frank determination to no longer be a party to fallacious, irrational and unscientific methods—for such is quarantine—is the realization of a long deferred hope. Stripped of its legal vestments, shorn of its imaginary hold in the popular mind, this offspring of ignorance and inexperience can but vanish with other delusions of the past.

There have been many who to their sorrow have elected to pin their faith to the very deceptive as well as temporary protection afforded by the occasional isolation of smallpox patients. Their final conclusions would make some rather interesting and in some instances highly amusing reading.

Instead of the former long and tedious details to small places where antagonism and opposition ran rife, often turning our best efforts into humiliation and defeat, we can now under the new regime handle these difficult situations with some degree of comfort. It is frequently noted that in any community the intelligent majority hastens, upon the announcement of the visitation of this malady, to secure for themselves the protective influence of vaccination. When this has been accomplished, it is only necessary to leave an ample supply of vaccine with the local physicians for the demands of the have-thought-it-over-and-decided-that-it-was-best-crowd, a crop of converts that generally increases with rather surprising rapidity as an epidemic progresses.



After some further advice with the local authorities regarding the future management of the disease in its different phases, the Health Officer is ready for other fields of action. For the increased efficiency, tremendous saving of both time and money, every loyal citizen should be grateful.

While it is possibly true that the hookworm campaign inaugurated some years since by the Board will continue without further special or organized effort, with its splendid work, the physical reclamation of our youthful citizens, I do not think, however, that conditions prevailing in many sections warrant this conclusion.

Quite recently, it was my pleasure to canvass a county in which, considering its population, two to four times as much work had been done in the treatment of these sufferers as had been accomplished in any other county in the state. The local medical men were thorough and efficient, they had made a special effort to free their section from this parasite. The inspection of their town school showed that 50 per cent. of the scholars were infested. Through their efforts the percentage had been reduced 15 per cent. The toilets were defective in their construction and as unsanitary as you would expect from continued neglect. In the country schools the infection was present in from 65 to 95 per cent. of the attendance, often including even the teacher. Two schools were without closets, some had only one. In every instance these adjunct buildings were poorly built and, so far as I could learn, none of them had ever been cleaned and disinfected.

At one place 75 per cent. of the children were barefooted, and one that had been recently treated and cured had contracted another attack of ground itch. There was not a community visited in which these good men had not treated and cured children infested with this trouble. You can imagine how gratifying it was to see their rosy cheeks and red lips, in contrast to the pale and wan features of their infected but untreated deskmates.

Yet, despite all the activities of these men, they had scarcely made an impression, so great was the volume of work to be accomplished. It was their testimony that as the crusade gained in popularity it had been comparatively an easy matter to gather in those cases among the intelligent, reading and thoughtful class; but as it extended into the untutored and unlearned it became progressively the more difficult. \* \* \* \*

Such conditions as obtain in that county in the main are to be

found in every other county in the state. The proof of the assertion that to allow the work to continue as at present means that the mass of the cases go untreated, is quite evident. While a good beginning has been made, still no one can go out and contemplate the field without being amazed at its vastness.

If this proposition is to be tackled with the seriousness that it demands, it would appear that in point of numbers at least our line-up is a bit weak. As the majority of the country schools have terms of from four to five months, it will necessitate a much larger force if much headway is to be made during this brief season. The country schools open during August or September and end before Christmas. In the past our program has been to commence the inspections during January. As a consequence, we are working at a time when these small institutions are closed and we are unable to reach those most in need of our attention.

The plan of our present method of handling the indigent is a well-thought-out one. It takes for granted that there will be an intelligent co-operation on the part of those applying for treatment and assumes that the conditions required will be understood to be for the interest of those taking advantage of the gratuity. Considerable observation of the measure in its trying out in the field convinces me that it is best adapted to those cases among the intelligent and appreciative public as well as those occurring in dispensary and hospital practice; that because of some of the conditions imposed it rather hinders the progress of the work among the less fortunate. While the strict compliance on the part of those taking the treatment in the prompt forwarding of specimens is necessary for the accumulation of data, the compilation of accurate statistics, it is, nevertheless, an unessential in the accomplishment of beneficial results, and is oftentimes an impossible obstacle in the management of those most in need of its benefits.

As a matter of fact, the microscope is of assistance only in cases where the infection is very mild—where there is a question as to the diagnosis. Experience tells me that this series is in the minority; that the mass of the cases demanding our attention present symptoms and evidences of unquestioned diagnostic import. The result is always the same as far as all practical purposes are concerned, and it makes no difference whether the previously instructed individual examines his stools after treatment

for the presence of the worms and keeps this up until their final disappearance, or whether the progress of the treatment is checked by an expert microscopist in a distant laboratory who examines the forwarded specimens at different intervals until the ova have disappeared.

It would seem, without further discussion, that in order to facilitate the accomplishment of more rapid and widespread results, it is essential that there should be a greater and more thorough distribution of unconditioned, unrestricted—in short, *free thymol*. What we need now is less microscope, less delay on account of data, and a more definite regulation of our efforts to suit the calibre of the patients and the demands of the situation we have to deal with; and last, but by no means least, more thymol. I would suggest a revision of the present methods with this attainment in view.

Respectfully,  
C. T. YOUNG,  
Assistant State Health Officer.

## DETAILS DURING THE YEAR 1911

DATE	TOWN	COUNTY	DISEASE	REMARKS
Jan. 2.....	Pine Castle .....	Orange.....	Smallpox....	Inspection of schools
	Mayo.....	Lafayette....	Hookworm...	
	Perry.....	Taylor.....	Smallpox....	
	Hampton Springs	Taylor.....	Smallpox....	
	Salem.....	Taylor.....	Smallpox....	
	Hines.....	Lafayette....	Smallpox....	Inspection of schools
	Boyd.....	Taylor.....	Smallpox....	
Jan. 6th to	Holmes Still....	Taylor.....	Smallpox....	
Feb. 18 ...	Shady Grove....	Taylor.....	Smallpox....	
	Pinetta.....	Taylor.....	Smallpox....	
	Thelma.....	Taylor.....	Chickenpox...	
	Mayo.....	Lafayette....	Smallpox....	
	Alton.....	Lafayette....	Smallpox....	
	Dowling Park...	Suwannee....	Smallpox....	
Feb. 20.....	Apalachicola....	Franklin.....	Smallpox....	Rumors
Feb. 22-7....	Hosford.....	Liberty.....	Smallpox....	
Feb. 28.....	Bristol.....	Liberty.....	Smallpox....	
Mar. 1-5.....	Blountstown....	Calhoun.....	Smallpox....	
Mar. 25.....	Plant City .....	Hillsboro....	Smallpox....	
Mar. 26.....	Youmans.....	Hillsboro....	Smallpox....	
April 10....	Newberry.....	Alachua.....	Smallpox....	
April 11....	Bell.....	Alachua.....	Smallpox....	
April 12....	High Springs ..	Alachua.....	Smallpox....	
April 13....	Gainesville....	Alachua.....	Smallpox....	
April 14....	Micanopy.....	Alachua.....	Smallpox....	Public health lecture Sanitary advice
April 15....	Ehren.....	Pasco.....	Smallpox....	
Apr. 29.....	Ocala.....	Marion.....	Smallpox....	
May 6.....	Winter Garden..	Orange.....	Smallpox....	
May 8.....	Dade City.....	Pasco.....	Smallpox....	
May 9.....	Pasco.....	Pasco.....	Smallpox....	
May 10.....	San Antonio....	Pasco.....	Smallpox....	
May 24.....	Ehren.....	Pasco.....	Smallpox....	
May 25.....	San Antonio....	Pasco.....	Smallpox....	
June 15.....	Gainesville....	Alachua.....	Smallpox....	Inspection of schools
June 15-20..	Newberry.....	Alachua.....	Smallpox....	
	Dutton's Mines..	Alachua.....	Smallpox....	
July 8.....	Tarpon Springs..	Hillsboro....	Smallpox....	
July 9-10....	Crystal River..	Citrus.....	Smallpox....	
Nov. 6.....	New Smyrna....	Volusia.....	Smallpox....	
	Leno.....	Clay.....	Hookworm...	
	Leesburg.....	Lake.....	Hookworm...	
	Lady Lake.....	Lake.....	Hookworm...	
	Fruitland.....	Lake.....	Hookworm...	
	Whitney.....	Lake.....	Hookworm...	Inspection of schools
	Okahumpka.....	Lake.....	Hookworm...	
	Lisbon.....	Lake.....	Hookworm...	
	Grand Island...	Lake.....	Hookworm...	
Nov. 10-28..	Eustis.....	Lake.....	Hookworm...	
	Umatilla.....	Lake.....	Hookworm...	
	Altoona.....	Lake.....	Hookworm...	
	Mt. Dora.....	Lake.....	Hookworm...	
	Tavares.....	Lake.....	Hookworm...	
	Clermont.....	Lake.....	Hookworm...	
	Minneola.....	Lake.....	Hookworm...	Inspection of schools
	Taylorville....	Lake.....	Hookworm...	
	Mascotte.....	Lake.....	Hookworm...	
	Mayo.....	Lafayette....	Hookworm...	
	Alton.....	Lafayette....	Hookworm...	
	Bartow.....	Lafayette....	Hookworm...	
	Midway.....	Lafayette....	Hookworm...	
	Airline.....	Lafayette....	Hookworm...	
Dec. 4-16....	Riverside.....	Lafayette....	Hookworm...	
	Bethel.....	Lafayette....	Hookworm...	
	Picketts Lake ..	Lafayette....	Hookworm...	Inspection of schools
	Steinhatchee....	Lafayette....	Hookworm...	
	Day.....	Lafayette....	Hookworm...	
Dec. 19.....	Willow Oak.....	Polk.....	Hookworm...	
Dec. 21.....	Kathleen.....	Polk.....	Smallpox....	
Dec. 30.....	Istachatta.....	Hernando....	Smallpox....	



## RECAPITULATION BY COUNTIES

## Smallpox:

Taylor county .....	143 cases
Lafayette county .....	1 case
Suwannee county .....	3 cases
Franklin county .....	2 cases
Liberty county .....	3 cases
Calhoun county .....	27 cases
Hillsboro county .....	5 cases
Alachua county .....	19 cases
Pasco county .....	6 cases
Orange county .....	6 cases
Citrus county .....	10 cases
Volusia county .....	1 case
Hernando county .....	2 cases
Polk county .....	2 cases

Total ..... 230 cases

## Diseases:

Smallpox.  
Chickenpox.  
Hookworm.

Sanitary nuisances.  
Public lectures.

## REPORT OF DR. E. W. DIGGETT

TALLAHASSEE, FLA., January 1, 1912.

*Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.*

DEAR DOCTOR: I have the honor to hand you herewith my annual report for the year ending December 31, 1911.

The work for the majority of the year has been confined to the prevention and spread of smallpox. Vaccination depots have been instituted, with more or less success, in Tallahassee and Apalachicola.

The latter part of the year has been devoted to hookworm work, visits having been made to colored and white schools, specimen outfits distributed and talks given on the subject, a dispensary and temporary laboratory being established in Tallahassee. I have been aided in this work by Mr. Edward Eppes, County Superintendent of Public Instruction, who accompanied me upon several occasions, introducing me to the teachers and delivering addresses before the children.

January 14th, I was directed to proceed to Apalachicola, where a report of smallpox had been made to the Executive Office. Upon investigation, found three cases in the pustular stage; one case, which had been isolated in the jail, confluent in type, later died. A vigorous crusade on behalf of vaccination was instituted with a varying amount of success. Dr. F. F. Ferris devoted considerable of his time, and was extremely courteous to your Assistant.

On January 23d, visit was made to Quincy, and an interview obtained with Dr. G. W. Lamar, Agent of the State Board of Health for Gadsden County. Several cases of smallpox were seen in and around Quincy. A number of tobacco factories were visited and a wholesale vaccination was done. In the work I was ably assisted by Dr. C. C. Mack, of Quincy, and also the town Marshall. Some 250 to 300 vaccinations were done at this time by Dr. Mack and myself.

February 2nd, I was directed to proceed to Blountstown, Calhoun County, to look into the smallpox situation at that point. Found upon investigation several cases of smallpox, discreet in type. These cases were under the care of Dr. B. V. Elmore. A visit was made to a large mill in the immediate vicinity of Blountstown, in company with Dr. Elmore, who was the company physician. A number of cases of smallpox were found in this camp, and the

absolute necessity of vaccination was urged upon the manager, but was refused on the grounds that the disease was so mild in type and that so many of the employees had already had the disease, that further vaccination was unnecessary. The situation was left in the hands of Dr. Elmore and no further steps were taken.

March 20th, I was directed to proceed to Cottondale to investigate a reported case of smallpox at that point. Found upon investigation two cases of smallpox, discreet in type, in a white family. These cases had been isolated by the family physician, Dr. Miller, and vaccination had been urged upon the people. I had the pleasure, on this occasion, of meeting the town Council and also a number of the citizens of Cottondale, and gave an impromptu address upon the necessity of vaccination as the only preventive of smallpox. After this address had been given a number of otherwise skeptical citizens accepted the offer of vaccination. The situation was then left in charge of Dr. Miller.

On April 16th, at the request of Mr. Nathaniel Brewer, I visited St. Marks and Newport, Wakulla County, to urge vaccination in both communities. The results on this trip were very gratifying. The entire population of Newport, with the aid of Mr. Brewer, were vaccinated, also a number of the citizens of St. Marks. One case of variola was seen in Newport, and reports of several cases, which, upon investigation, proved to have been smallpox, were received. I take this opportunity to thank Mr. Nathaniel Brewer for his kind and extremely courteous treatment. It was only through his personal encouragement that I was enabled to do such effective work.

April 18th, in answer to a request from the citizens of Vereen, Wakulla County, I visited the town and interviewed a number of the prominent citizens. The majority of these were northern people, from Minnesota and Michigan, where quarantine had been rigidly enforced. A request for quarantine against smallpox was received. The attitude of the State Board of Health of Florida against smallpox was explained and the futility of quarantine urged. Free vaccination was offered, but at this time was not accepted.

April 23rd, I was directed to proceed to Apalachicola, to investigate a number of cases of smallpox reported by Dr. Ferris. Found upon investigation several cases among the colored, mild in type. Dr. Ferris at this time complained of the apparent apathy

on the part of the citizens of Apalachicola on the subject of vaccination. Upon this occasion I interviewed the Mayor and one or two members of the town Council. An ordinance had already been passed requiring vaccination, but it was thought not necessary to enforce this ordinance among the whites inasmuch as no cases of smallpox had developed among them up to that time.

On April 23rd, I visited the town of Wakulla at the request of some of the prominent citizens, to vaccinate as many of the townspeople as would accept. I met on this occasion, with considerable enthusiasm, and some 50 or 60 vaccinations were done.

During the latter part of April I made three separate visits to Woodville, Leon County, and at each visit was successful; vaccinating almost the entire population. One case of smallpox was seen at this time, the case being that of a prominent white citizen, which was of a severe type of discreet smallpox.

In the interim between these visits already mentioned, a vigorous crusade in behalf of vaccination was being carried on in and around Tallahassee. A number of severe cases of smallpox were seen and several deaths reported. Smallpox of a confluent type was seen, but the majority of cases were discreet. Considerable comment was made upon the management of smallpox in Tallahassee by the members of the legislature, which was in session. Cases were seen walking the streets of Tallahassee, with the eruption, in the pustular stage, upon their faces. The only explanation your Assistant can give of this, is the following: The large majority of people in the county are negroes. The disease, in the majority of cases, was so mild in type that those suffering from it did not realize the gravity of the same, and in most instances, did not seek the advice of a physician. In many instances these cases were not even confined to their rooms, and after the symptoms of fever, etc., subsided, would immediately resume their daily occupation, and at the end of a week would make their weekly visits to Tallahassee to do their trading, and this would be the first and only knowledge of such cases obtained by Dr. Moor, your County Health Officer, and myself.

Quarantine was demanded by a number of members of the legislature, and also by a number of citizens. Isolation was carried out where possible and successfully in the majority of cases.

A very unfortunate incident occurred about this time. A white man who had recently come to Tallahassee, and who was boarding



in one of the numerous boarding houses, was taken ill and was seen by one of the local physicians and treated for malaria, the symptoms simulating that disease. The physician, upon a subsequent visit, noticed a suspicious eruption, and your Assistant was notified and invited to see the case. Upon visiting this case, I met with considerable abuse from the lady of the house. I was ordered to remove the patient, and both the physician and myself were taken to task for not notifying her that the patient was developing smallpox. Considerable effort was made to find a suitable place to isolate this case, but with no avail. The man was then isolated in his room, and vaccination was urged upon the household, but was refused. The man was ordered to remain in his room, and all precautions, so far as possible, were taken to prevent a spread of the disease by contact, the proprietress of the boarding house being notified that the State Board of Health was in charge of the case and that all necessary expenses would be assumed by them. In spite of these orders, I was notified, about night-fall, by the Chief of Police, that the man had been ejected from the house and that at the time he was sitting, with his worldly possessions, on the doorstep of a shed opposite to the boarding house. After considerable effort, permission was gained from the owner of the shed, and a room rented and furnished therein. The Mayor, Mr. Lowery, was kind enough to accompany me when I visited the owner, and arrangements were made whereby the city of Tallahassee agreed to share the expense of the rental of the building. Fortunately for all concerned, this case proved to be mild in character, and after eighteen days of isolation, was discharged. The above incident, unnecessary to say, caused considerable comment on the part of the citizens of Tallahassee.

The exact number of cases of smallpox that have occurred in Leon and adjacent counties during the year, is not definitely known, possibly only fifty per cent. of the cases being reported.

Wherever possible visits were made to the plantations where the disease was known to exist and vaccination urged. In this way, with the able assistance of Dr. Moor, County Health Officer, and, in several instances, of the local physician, a considerable number of vaccinations were done. It is gratifying to state that at this time the old time prejudice against vaccination is rapidly disappearing, especially among the negroes.

As stated in my 1910 report, Dr. Moor kindly placed a room at my disposal where free vaccination was done. This arrangement was not without its annoying features, at times the office being crowded with vaccination subjects, both white and colored. I take this opportunity to express my thanks to Dr. Moor for his kindness and able assistance in this work.

May 15th, in answer to a request from Dr. Ferris, I visited Apalachicola and delivered addresses before the public schools, both white and colored, on the subject of smallpox and vaccination. These talks were listened to with considerable interest by both teachers and students. I wish to take this opportunity to thank Dr. Ferris for his kindness and courtesy in accompanying me to these schools and introducing me to the teachers and the children in such an appropriate way.

The idea was conceived at this time, of establishing a depot for free vaccination. Dr. Ferris kindly volunteered his assistance, and the matter was brought to your attention and was approved by you.

Owing to stress of work in Tallahassee, I was compelled to return there, but made an agreement with Dr. Ferris to return to Apalachicola to open the free vaccination depot.

May 19th, returned to Apalachicola and after looking over the situation there with Dr. Ferris, decided upon renting a room for the purpose of establishing the free vaccination depot. Spent two days in Apalachicola at this time, establishing regular hours for free vaccination. This work was turned over to Dr. Ferris after having heard from you that the Doctor had been appointed Agent for the Board for Franklin County, to hold office jointly with Dr. Blount of Carrabelle.

May 27th, I left Tallahassee, to go abroad, after having been graciously granted leave of absence for two months by the State Health Officer.

August 10th, I was directed to proceed to Oxford, Sumter County, to investigate reported cases of smallpox in that vicinity. In company with the local physician I visited these cases, and found after a thorough investigation, three cases of smallpox, discreet in type. Interviewed several members of the school board and county commissioners. Found considerable opposition to vaccination, but was able, after giving a short talk on the subject to vaccinate all those present.

August 15th I was directed to proceed to Panama City, Washington County, to investigate smallpox reported from several points along St. Andrews Bay. Met the State Health Officer and Assistant State Health Officer, (Dr. Byrd), at Panama City, and was accompanied by Dr. Byrd in this investigation. The situation was gone over thoroughly and was left in the hands of the local physicians. Returned to Carrabelle on the steamer *Tarpon*, in company with the State Health Officer and his Assistant, Dr. Byrd.

Was directed to proceed from Carrabelle to Tallahassee, to investigate the typhoid fever in that town. Found upon investigation two cases widely separated, and reports of several other cases. The source of infection of these cases could not be attributed to any pollution of water or milk supplies. It was decided that flies had played an important part in the distribution of the disease, and screening of outhouses was advised, and the matter referred to the City Sanitary Inspector. A visit was made to the city works for the disposal of sewage, in company with Mr. Perkins, the sanitary engineer. Nothing but praise can be given Mr. Perkins upon his efficient management of the septic tanks, and it was gratifying to learn, through him, that a visit from the constructing engineer had brought forth the statement that the septic tanks at Tallahassee were among the most efficient that he had constructed. After this investigation I returned to Jacksonville:

On August 28th, I was directed to proceed to Pablo Beach, Duval County, to investigate the sanitary conditions of the town. In company with the marshal, I made a tour of inspection and furnished a full report, with drawings, to the office to be later passed over to the town council of Pablo Beach.

On September 9th, I was directed to proceed to Citra, Marion County, to investigate a case of smallpox reported from that town. In company with the local physician the case was seen and found to be well defined, discreet in type. Vaccination was urged, but refused. Upon my return to Jacksonville, I was rendered *hors de combat* by a mild attack of typhoid fever.

September 30th. It was thought best at this time that your Assistant should change headquarters from Jacksonville to Tallahassee, which was done.

November 11th, I was directed to proceed to Marianna, Jackson County, to investigate a number of cases of smallpox reported by Dr. West. County Health Officer. In company with Dr. West

some of the cases were visited, and smallpox found, discreet in type. A full report of the smallpox situation in Jackson County will, no doubt, be presented by Dr. West. It does not seem amiss at this time, to thank Dr. West for his kind and courteous treatment to me on my visit to Marianna.

In compliance with your request of November 20th, to investigate the hookworm situation among the negroes of this county, and to clear up, if possible, the part played by the negro as a disseminator of hookworm infection, a temporary laboratory for the microscopic examination of specimens was thought of, also a dispensary for the free treatment of hookworm disease.

An interview was obtained with Mr. Edward Eppes, Superintendent of Public Instruction of Leon County, and the subject was gone over carefully with him. At Mr. Eppes' suggestion an interview was obtained from the County Commissioners of Leon County, and a room in the Court House was placed at my disposal, available at the end of the December term of court.

In company with Dr. Eppes, I visited a number of schools, both white and colored. Specimen outfits were distributed and specific instructions were given to the teachers, and where possible, also to the parents, for the collection and return of same to me at Tallahassee. It was found at the time to be impossible to obtain specimens of blood, for estimating the hæmoglobin index, the slightest suggestion of any surgical procedure being met with almost a condition of panic. During these trips numbers of individual families were visited and specimen outfits distributed.

The results, so far as return of specimens is concerned, were not as gratifying as might have been. In many instances the specimen bottles were returned empty. The microscopic result proved the existence of hookworm disease in the negro but to a lesser extent than in the white. It is too early at this time, to come to any definite conclusions, but it is hoped that in the coming year, sufficient specimens may be obtained, and the question of the negro as a disseminator of hookworm infection solved.

In several instances when visiting schools, I found the teachers had a good understanding of the subject of hookworm disease: for illustration: on my visit to Rose I found both teachers, both white and colored, had been in attendance at the Florida State College for Women and the Florida Agricultural and Normal School, and that both had heard, and from their knowledge,



must necessarily have been appreciative listeners, to lectures on hookworm disease delivered by Assistant State Health Officers, Drs. Byrd and Young.

The work ended for the year on the closing of the schools for the Christmas holidays, but it is hoped that the campaign for the eradication of hookworm disease may be taken up the coming year.

The offer of the room in the Court House was considered, but owing to the uncertainty as regards the length of time possible for occupancy, it was thought best not to remove headquarters until something definite could be obtained. The character of the microscopic work makes it impossible for me to continue in my present headquarters, Dr. Moor's private office, and a formal request is hereby made for the privilege of obtaining a room suitable for a temporary laboratory and dispensary.

Respectfully submitted,

ERNEST W. DIGGETT,  
*Assistant State Health Officer.*

## REPORT OF DR. H. P. NEWMAN

BARTOW, FLORIDA, January 1st, 1912.

*Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.*

DEAR DOCTOR: I beg to hand you herewith my annual report for the year 1911.

January 1st. Detailed by wire to Alachua, Alachua county, reported smallpox. Investigation showed the disease present in the town of Alachua, the vicinity of Haynesworth and among construction crews of the Atlantic Coast Line Railroad camp cars stationed at Haynesworth for the holidays. Quite a number of cases had already developed. All of the people in the vicinity of Haynesworth and quite a number in the town of Alachua were vaccinated.

January 18th. A case of smallpox developed in Alachua county near Santa Fe. Case was isolated and contacts vaccinated; the threatened epidemic ending without further event.

January 20th. Smallpox was reported in Atlantic Coast Line Railroad construction cars at Archer, Alachua county. On investigation about one-half of the crew was found to be infected with variola. Cars were sidetracked, cases isolated and the healthy laborers vaccinated. Both white and colored schools and 200 citizens of Archer and vicinity were vaccinated.

A case of variola at this time developed at Meredith, Levy county, which was isolated, contacts and white school vaccinated. I wish to thank Dr. Rice of Archer for courtesies and co-operation extended the State Board of Health and myself.

Returned to my home at Bartow on February 15th.

February 22nd. Detailed to Fort Myers, Lee County. Investigation revealed two cases of smallpox that had been isolated and were being guarded by the city of Fort Myers. Instructions were given the Mayor as to our methods of control and our policy governing all such occurrences.

February 24th. Ordered to Boca Grande, Lee County. Investigation showed two well developed cases of smallpox on Boca Grande Island; both cases had been isolated and the majority of the citizens vaccinated by the local physician and myself. Returned to Bartow February 26th.

February 26th, to July 1st. Continual smallpox work in Polk and DeSoto Counties. The disease was prevalent in Polk County at Bartow, Fort Meade, Winter Haven, Mulberry, mining dis-

tricts and eastern Polk County. In DeSoto County at Jane Jay, Tighlman, Bowling Green, Gardner, Limestone, Fort Green, and DeSoto County Jail at Arcadia. During the period between March 1st, and July 1st, about 200 cases of variola were isolated and treated; approximately 5,000 people were vaccinated in the two counties, 4,000 in Polk County, of which one half were in the city of Bartow. At Fort Meade, Polk County, I experienced difficulty in vaccinating. A small per cent. of the whites were vaccinated but very few negroes, the result being that Fort Meade had more cases of variola than any point in the two counties, regardless of the isolation of cases in a temporary hospital erected by the town council and over which I had supervision.

March 20th. I was detailed to Starke, Bradford County, reported smallpox. Found one case of smallpox under the care of Dr. Freeman, who had the patient isolated and contacts vaccinated.

March 21st. Inspected Seaboard Air Line Railway construction cars at Maxville, Duval County, and found "all hands" either recovering from or suffering with variola. These cars were ordered sidetracked and detained. Five patients were taken to the Duval County Isolation Hospital.

March 24th. Returned to Bartow, Polk County, to resume vaccination and smallpox work in the county.

June 12th. Investigation of typhoid fever at Mulberry, Polk County, was made, showing the house fly to be the common carrier and absence of screens to residences and living quarters. My report at that time covers in full my findings. About June 20th I also investigated a typhoid epidemic at Chubb, Polk County, my report at that time covering the matter fully.

July 9th. Detailed to Morrilton, Levy County, reported smallpox; failed to locate any cases at Morrilton or Montbrook, but found one case near Juliette, Marion County, which was isolated.

August 6th. Detailed to Wauchula, DeSoto County, to investigate reported typhoid fever. Investigation failed to reveal any cases of typhoid. Literature covering the prevention of the disease was distributed.

August 22nd. Detailed by wire to Hawthorne, Alachua County, reported smallpox. Investigation showed three cases near Rochelle which were isolated and houses placarded. A few contacts were vaccinated.

September 19th. Detailed to Monticello, Jefferson County, reported smallpox. Found several cases convalescent and contacts had been vaccinated.

September 23rd. Detailed from Monticello to Centralia, Hernando County, reported smallpox. Investigation showed one case of the disease which had been isolated in a tent far removed from any place of abode. The local physician had vaccinated the volunteers for protection. Returned to Bartow September 27th.

October 2nd. Detailed to Brooksville, Hernando County, to investigate so called sanitary nuisance. My report of October 4th gives the particulars.

October 11th. Detailed by wire to Romeo, Marion County, reported smallpox. One case found in Atlantic Coast Line Section house, patient isolated and house placarded. Very few vaccinations.

October 13th. Administered hog cholera serum to hogs at Agricola, Polk County.

October 16th. Administered hog cholera serum to hogs at Fort Meade, Polk County.

October 17th. Administered hog cholera serum to hogs at Ona and Wauchula, DeSoto County.

October 21st. Detailed by wire to Floral City, Citrus County, reported smallpox. Upon investigation, found one case, a negro, fifteen miles in the west end of the county.

November 1st. Detailed to Orange City, Volusia County, reported smallpox. Investigation revealed three cases which were isolated and houses placarded. The citizens seemed indifferent to vaccination and only a few would take the protection.

November 6th. Ordered to Romeo, Marion County, reported smallpox. Found one case variola, patient isolated, contacts and many others vaccinated.

November 7th. Detailed to Interlachen, Putnam County, reported smallpox; on investigation found three cases which were isolated and the usual instructions given. The white and colored schools and more than fifty citizens were vaccinated.

November 13th. Ordered from Interlachen to Istachatta, Hernando County; reported smallpox; found evidence of one case. Citizens indifferent to vaccination. Returned to Bartow November 15th.



November 16th. Administered hog cholera serum to hogs at Wauchula, DeSoto County.

November 21st. Detailed to Lake City, Columbia County, reported smallpox. Investigation showed several cases in negro settlements south of Lake City, four and one-half to seven miles distant. Cases were isolated and usual instructions given. In the surrounding neighborhood I have succeeded in vaccinating ninety per cent. or about 400 negroes. Recently five cases have developed at Watertown; very few have been vaccinated.

December 24th. Polk County Jail inspected, six cases of smallpox being found. All officers, attaches and prisoners vaccinated.

The close of the year 1911 finds me as yet on the Lake City detail, endeavoring to vaccinate all who will receive it.

Yours very truly,  
H. P. NEWMAN,  
*Assistant State Health Officer.*

## LABORATORY DIVISION

REPORT OF DR. HENRY HANSON, SENIOR BACTERIOLOGIST

JACKSONVILLE, FLORIDA, January 1st, 1912.

*Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Florida.*

Dear Doctor:—I herewith submit report of the work accomplished in the Central Laboratory of the State Board of Health of Florida, at Jacksonville, for the year 1911.

In briefly comparing the work of the year 1911 with that of 1910 we notice there is a decrease of 1,652 in the number of specimens submitted to the Central Laboratory. This decrease is accounted for in part by the difference in the number of specimens submitted for animal parasites for the two years. There were 2,234 more specimens for animal parasites in the year 1910 than in 1911. Of other specimens, however, there is an actual increase in the number submitted. The decrease in the Central Laboratory can also be partially accounted for by the increased number of specimens received in the branch laboratories, since a great many of the physicians in the towns who are now patronizing the Tampa and Pensacola laboratories formerly sent their specimens to Jacksonville.

Containers and mailing cases have been sent out from the Central Laboratory with mailing directions corresponding to the locality from which the requests were received. The majority of the outfits have been for the Central Laboratory, and the number sent out bearing Tampa and Pensacola labels have been in proportion to the amount of work in those laboratories as seen from the daily reports. Most of the specimens received in the Central Laboratory have been from distant points. The number of specimens from Jacksonville has been decidedly less during 1911 than during the year 1910.

In addition to the containers vaccine points have been sent out according to instructions from the Executive Office. The sum total for the year 1911 is as follows:

Containers for collecting specimens of excreta to be examined for hookworms or other animal parasites .....	7,031
Containers for collecting specimens of sputum to be examined for tubercle bacilli; containers for sending swabs from throats for examination for presence of diphtheria bacilli; slides in mailing cases for malaria, gonorrhea and opthalmia, and sterilized bottles for collecting samples of water to be examined for evidence of sewage contamination .....	7,037
Vaccine points sent out .....	43,603
Total .....	57,671

There is a small increase in the number of blood smears submitted for malaria, and a decrease in those submitted for the widal reaction, which increase and decrease practically balance and make the sum total of such specimens approximately the same as it was for the year 1910.

There is, on the other hand, an increase in the number of specimens submitted for tuberculosis; also, a decided increase in the number of diphtheria examinations for the year. When one remembers that these specimens submitted for communicable diseases are from decidedly more limited territory and still show an increase, one cannot but feel that the efficiency and usefulness of the laboratory is continuing to grow.

There is one feature of the past year's work, however, which requires special attention and consideration, and that is the matter of rabies. We find that for the past year the laboratory has made 169 examinations for rabies. This is a very high figure and one that should cause a great deal of concern. Of this number 100 were found to be positive, a certain number doubtful and the remainder negative. The different animals submitted for examination, in addition to one human being, are dogs, cats, horses, mules, monkeys, rabbits, guinea pigs and rats. As a result of this a great many animals of all kinds have been killed because of having been bitten by animals in which the evidence of hydrophobia had been found by laboratory examination. Numerous valuable dogs as well as cattle, goats and even chickens have been destroyed by these rabid animals. It has been reported that three deaths from rabies have occurred in human beings in this locality during the past year, two of which were known to be definite cases, and the third hearsay. In addition, another death has occurred in a different portion of the state. This clearly indicates that rabies is a most grave and important problem for the State Board of Health and one in which there is room for more careful work and investigation. This feature of rabies will be discussed in another section of this report.

The rest of the work does not call for special consideration here. The nature and amount of the miscellaneous work can be seen in the tabulation of specimens submitted herewith.

The tabulated statement shows a general increase except in the number of specimens examined for animal parasites, in which there is a decrease of 2,234. The decrease in the number of

typhoid specimens this year is accounted for by the very decided decrease of typhoid in the city of Jacksonville during the summer of 1911 as compared with the summer of 1910.

STATEMENT OF SPECIMENS EXAMINED IN THE CENTRAL LABORATORY- JACKSONVILLE, 1911

Material Examined	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals	Grand Total
Animal Parasites:														
Hookworms,														
Positive	154	143	182	218	259	224	265	224	144	189	150	151	2,303	
Negative	105	118	114	191	159	161	198	151	137	136	172	122	1,764	
Doubtful	1	2	--	1	7	--	--	--	--	--	--	--	11	
Amoeba	3	4	3	--	1	5	--	1	1	2	1	--	21	
Ascaris lumbricoides	--	1	5	2	1	8	1	1	5	2	1	3	30	
Oxyuris vermicularis	--	--	--	1	--	--	--	--	--	--	--	1	2	
Lamblia intestinalis	--	1	--	--	--	--	--	--	--	--	--	--	1	
Strongyloides	1	--	--	--	--	--	--	--	--	--	--	--	1	
Tapeworms	1	--	1	1	1	1	4	4	--	1	5	2	21	
Trichiuris	--	--	2	1	1	--	1	3	8	1	--	--	17	4,171
Diphtheria:														
Swabs,														
Positive	1	2	6	8	13	3	--	8	11	8	16	9	85	
Negative	14	21	11	24	10	10	10	6	7	23	56	42	234	
Doubtful	5	6	3	6	11	--	3	3	12	7	11	13	80	
Cultures,														
Positive	4	3	9	13	17	2	1	6	11	11	24	10	111	
Negative	17	34	14	25	15	10	11	4	8	24	33	45	240	
Doubtful	--	1	--	2	6	--	1	5	6	4	5	8	38	788
Gonorrhea:														
Positive	13	11	20	13	15	8	8	12	13	17	9	5	144	
Negative	12	11	34	28	28	28	22	31	17	22	23	15	271	
Doubtful	1	1	4	4	2	--	--	1	4	--	--	--	17	432
Malaria:														
Positive	25	5	7	8	10	10	19	16	15	12	7	17	151	
Negative	224	105	100	105	153	115	136	110	103	97	65	96	1,409	
Doubtful	2	4	4	6	3	3	2	14	17	7	2	7	71	1,631
Pathological specimens:														
Adeno-Carcinoma	--	--	--	--	1	--	--	1	--	--	--	--	2	
Carcinoma	--	--	--	1	1	4	--	1	--	2	2	2	13	
Chronic Inflammatory	--	2	--	--	--	--	--	--	--	--	--	--	2	
Fibroma	1	--	--	--	1	--	--	--	1	--	--	--	3	
Growths:														
Benign	12	--	--	3	3	3	3	--	--	1	--	--	25	
Pigmented mole	--	--	--	--	--	--	--	--	--	1	--	--	1	
Sarcoma	3	--	--	--	--	2	--	--	--	--	2	--	7	
Retained Secundines	--	--	--	--	1	--	--	1	--	--	--	--	2	
Tumors	4	--	--	--	--	--	--	--	--	--	--	--	4	
Unclassified	11	11	12	--	--	--	--	9	--	--	--	3	46	
Villous Papilloma	--	--	--	--	--	--	--	--	--	1	--	--	1	106
Rabies														
Dogs,														
Positive	--	7	22	8	6	4	4	11	8	6	3	7	86	
Negative	1	1	7	8	3	8	3	1	2	3	1	7	45	
Doubtful	1	--	4	3	2	--	--	1	3	1	--	--	15	



## STATEMENT OF SPECIMENS EXAMINED—Continued

Material Examined	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals	Grand Totals
Cats,														
Positive .....	--	1	--	--	--	--	2	1	1	1	--	2	8	
Negative .....	--	1	--	--	2	3	1	--	1	--	--	--	8	
Horse, Negative .....	--	--	--	1	--	--	--	--	--	--	--	--	1	
Rabbit, Positive .....	--	--	--	2	--	--	--	--	--	--	--	--	2	
Guinea pigs, Positive .....	--	--	--	1	--	--	--	--	--	--	--	--	1	
Rats, Negative .....	--	--	--	--	--	--	--	--	--	1	--	--	1	
Mule, Positive .....	--	--	--	--	1	--	--	--	--	--	--	--	1	
Monkey, Positive .....	--	--	--	1	--	--	--	--	--	--	--	--	1	169
Tuberculosis:														
Positive .....	31	18	26	29	40	18	35	12	25	25	15	18	292	
Negative .....	93	66	110	79	79	56	61	54	62	64	51	60	835	
Doubtful .....	--	1	2	2	--	2	--	--	--	--	--	--	7	1,134
Typhoid:														
Positive .....	4	7	20	13	6	2	36	98	38	24	12	22	278	
Negative .....	32	42	49	65	105	91	109	38	56	60	40	60	750	
Incomplete reaction ..	14	12	41	54	35	47	17	13	16	10	8	10	277	1,305
Para-typhoid:														
Positive .....	--	--	--	--	--	--	--	--	--	--	1	--	1	
Negative .....	2	--	--	--	--	--	--	--	--	--	1	--	3	4
Urinary analyses .....	9	13	16	6	14	10	7	10	13	9	20	18	--	144
Water for sewage con-														
tamination:														
Positive .....	1	--	--	1	1	--	--	--	--	1	--	--	4	
Negative .....	4	--	9	26	4	1	1	7	6	3	2	--	63	67
Miscellaneous:														
Animal inoculations ..	--	1	8	9	10	8	3	--	1	--	--	--	40	
Cream .....	--	--	4	--	--	--	--	--	--	--	--	--	4	
Blood counts,														
Differential .....	152	38	6	1	6	2	--	2	1	1	2	18	229	
Plain .....	--	--	10	2	13	3	--	7	--	--	2	--	37	
Fungus .....	--	--	--	--	--	--	--	1	--	--	--	--	1	
Gastric contents .....	--	--	--	1	1	1	--	2	--	--	--	--	5	
Hemoglobin tests .....	--	--	5	2	1	--	--	1	--	--	--	--	9	
Leukemia .....	--	--	--	--	--	--	--	1	--	--	--	--	1	
Leprosy:														
Positive .....	--	--	--	--	--	1	--	1	--	1	--	--	3	
Negative .....	--	--	--	--	1	3	1	--	--	5	--	--	10	
Myiasis .....	--	--	--	1	1	2	--	3	--	--	--	--	7	
Milk counts .....	--	--	--	2	--	--	1	--	--	20	--	--	23	
Opthalmia .....	--	3	11	--	--	2	2	--	--	2	--	--	20	
Pernicious anemia .....	--	1	--	--	1	--	--	--	--	--	--	--	2	
Plural exudate .....	--	--	1	--	--	--	--	--	--	--	--	--	1	
Post mortems .....	--	--	2	--	--	--	--	--	--	--	--	--	2	
Spinal fluid .....	--	--	5	1	1	--	--	1	--	--	--	--	8	
Syphilis .....	--	3	1	3	1	2	--	1	--	--	2	--	13	
Spermatazoa .....	--	--	--	--	--	4	--	--	--	--	--	--	4	
Ring worm .....	--	--	--	--	--	1	--	--	--	--	--	--	1	
Unclassified .....	--	28	--	7	6	37	10	18	48	18	27	6	203	769
Totals by months....	957	717	892	992	1057	907	979	888	840	784	773	790	--	10,576

The work has been accomplished by the same laboratory force as that in 1910 with this exception: for practically one-half the year the laboratory has been a man short. This shortage of help was due in part to the fact that the Central Laboratory has supplied help in the laboratory at Tampa during the vacations of the men there. The vacations have been of the greatest benefit to the health of the personnel of the laboratories. It is extremely difficult and trying for persons engaged in confining work of this kind continuously twelve months out of the year without any vacation and the provision which the Board has made by which it grants a month's leave of absence to each member of the laboratory force, is a most judicious one. It is in fact a necessity for maintaining the good health of the people concerned.

In addition to the routine of the laboratory work, the writer was detailed during the first two weeks of October on a tour of inspection to laboratories and supply houses of the leading cities of the east and north. The tour was made in the interest of the equipment for the new laboratory. A separate report has been submitted of this tour of inspection and needs no further mention in this report.

The work has been conducted in the old quarters throughout the year 1911 and we are most happy to state that with the closing of the year we find the laboratory division in the new building complete and ready for occupancy as soon as the fixtures are completed and installed. The difficulties of conducting the work in the old quarters need not be enumerated here. The advantages of the new quarters, however, are worthy of thought and afford pleasant anticipation. The new quarters are such that we expect to have a place for each line of important work. There is a large general laboratory room splendidly equipped for such work as we expect to do, and a place where one need not get the work confused for lack of space. A smaller room has been provided for such special work as the man in charge desires to do. It is hoped that this division can be equipped with such modern apparatus that there shall be no delay or inconvenience in undertaking any problem which it is necessary to investigate. The large laboratory room is provided with two hoods by means of which one can prevent any obnoxious gases or fumes from being disseminated throughout the room. Incubator and Refrigerator rooms are also provided. It is proposed that the incubator room be heated by a

stove as designed by Dr. Hitchins of the Mulford Laboratories.

The Refrigerator room is to be divided into two compartments, the smaller of which measures 8 feet long by 4 feet wide by 11 feet high. The larger one measures 8 feet long by 8 feet wide by 11 feet high. It is hoped that an automatic refrigerating plant can be installed in this, by means of which the temperature in the two compartments can be kept constant to within two or three degrees throughout the twenty-four hours of the day. It is necessary, however, to separate the two rooms by means of a four-inch cork wall in order that there may be no leakage of temperature between the two compartments. The larger compartment of the refrigerating room is to be kept at a temperature of approximately 65 degrees which compartment is to be used for the purposes where one desires constant so-called room temperature, especially for incubating bacteria on gelatin. These rooms, however, have not so far been provided with shelving, for which purpose one-half inch or three-quarter inch iron pipe can be used.

The basement has been most admirably arranged for work which is to supplement the work in the general laboratory room. The media and sterilizing room is going to prove of the greatest benefit. This is connected to the main laboratory above by a dummy waiter, by means of which the media and various supplies can be sent up or down as desired. In connection with the media room there is a smaller room which can be used for purposes of such animal operations as are found necessary to properly carry on the work. The chemical laboratory is also provided with sufficient apparatus with which to do all the necessary analyses of a chemical nature. In connection with the chemical laboratory there is a dark room which can be used for photographic purposes and other special work where daylight is not desired.

There is but one thing lacking which is necessary to make our equipment and working facilities modern and equal, if not superior, to that of any other Board in the country, and that is the matter of the animal house. Plans, however, have been made and blue prints submitted for such a structure as is desired. The plans of the animal house as submitted, cover all the requirements of such a building, and it is most sincerely hoped that the Board will see fit to grant the construction of the animal house as specified. The animal house as planned, is one which will be a credit to the state, both in appearance and general usefulness, and

one which is most durable in character. All these things are essential for the increased scope of the work of the Central Laboratory of the State Board of Health.

The scope of the work has gradually widened out during the past two years until there are very few problems which directly or indirectly concern the public health that cannot be handled either as State Board of Health work or as an adjunct to the same. During the past year we have had several requests for medico-legal work which otherwise could not be done in the state, but which we unfortunately, have been compelled to put off on account of improper facilities. These requests have been of such a nature that justice could not be meted out without the results of the work requested.

Several requests have been made for Autogenous vaccines. One instance deserves special mention here, and that is where a patient from a distant part of the state came, requesting that a vaccine be made in the hope of curing a case of furunculosis of twelve years standing. A culture was taken from this patient; the organism recovered from the lesion was found to be the *staphylococcus pyogenes albus*, and a vaccine was prepared according to Wright's method. The dose administered for the first two injections was 250,000,000 and later for about four weeks 600,000,000 per week and then 900,000,000. The patient in the course of three months became entirely free from his furuncles and gained in weight from 160 to 190 pounds. He is at present to all appearances a perfectly well man. It is hoped that a great deal of work of this nature can be undertaken during the coming year. It is a subject of the greatest importance and most general usefulness to the profession of the state. It is the most rational form of treatment in chronic suppurative cases.

Of the public health problems which confront the State Board of Health there are a great many, some of which are mentioned below: As seen locally the subject of rabies may be classed as one of the first importance. As is well known, when a case of rabies is well developed, death is inevitable. This becomes more serious when one finds that the civil authorities make no appreciable effort to enforce the regulation or follow out the advice of the health authorities for the suppression of this deadly malady. It will, therefore, be well worth our time and effort to make certain investigations into some means for a remedy in developed cases.



It will certainly be a desirable thing to prepare a serum which would combine with the toxin in such a case and thus off-set the disease. This will, of course, require a great deal of careful work and a great many experimental animals will have to be sacrificed. However, if accomplished, the end will certainly justify the means.

Another subject which should deserve more consideration from a bacteriological standpoint, is that of infantile diarrhea. All cases of this sort should be made reportable and a bacterial examination made of the stools.

Third, the subject of latent gonorrhea should receive more bacteriological consideration. It is extremely difficult to give a satisfactory opinion of the specimens which are submitted from cases of latent gonorrhea. The importance of this is certainly a public health problem, because it is a fact well known to the physicians that many an innocent woman has been ruined by marriage with those who have been pronounced supposedly cured but in fact have harbored latent infections. The common history of loss of health after marriage and a disfiguring operation of an extensive nature which subsequently incapacitates the woman for child-bearing is an evil which an accurate diagnosis of the quiescent state might avoid.

The common drinking cup which has received a great deal of notoriety in recent years, brings up other problems to which you have already called attention. In spite of the fact that the danger from the common drinking cup has undoubtedly been very much overrated, it, nevertheless, has certain very grave possibilities which should either be proved or disproved. A large series of experiments should be undertaken in this connection, cultures obtained and their virulence tested out with the laboratory animals. "Wherever there is a big smoke, there must be some fire." The subject of diphtheria carriers will go hand in hand with this investigation of the public drinking cup.

The bacterial flora for this locality is something which has not been thoroughly worked up, and should receive as much time as is at the disposal of the laboratory force. Some of this may be a public health problem; other portions of it may be simply of a purely scientific nature; nevertheless, they are matters concerning which the Central Laboratory of the State Board of Health should have information and data. Stock cultures ought

to be kept of all the most important bacteria, as well as of all those of a more purely scientific interest.

Vital staining is a subject which is coming into prominence in this country. Some most brilliant work has recently been done and is being done by Dr. Evans of the Johns Hopkins Medical School. The possibilities of the additional information which this will give have not yet been estimated, but the results achieved are such that we can hope for a great deal.

Dr. H. R. Mills has expressed his desire to undertake investigations of rattlesnake venom.

In view of these things it becomes more and more important that an addition should be made to the personnel of the laboratory force. The addition referred to is that of a competent technician. A laboratory of this size and with the scope of work which it has, cannot succeed without such help.

The Library: During the year some additions have been made to the library in the line of journals and books. These have proven of great assistance as reference material. It is desired, however, that further additions be made during the year. More text books on chemistry are needed, also other reference books on pathology, especially such texts as have a liberal number of good clear cuts of the various pathological processes. It would be an advantage to the laboratory force and to all of those concerned, if we might have a journal rack where each journal could be made accessible and placed in the assembly room in the new building. During the year several volumes of old journals have been completed and bound.

Before closing the report I wish to state that each member of the laboratory force deserves special mention for the faithful and conscientious manner in which they have carried out their respective parts in the year's work. Each one has taken a personal interest in keeping the work up to the highest standard and in making sure that all reports, whether they be of small or great importance, were accurately made and recorded.

My obligation is, therefore, especially to Dr. H. R. Mills and to Dr. I. C. Youmans who are the chief members of the diagnostic force, and to Mr. H. P. Brown for assisting both in the diagnostic work and in the keeping of records and supervising the shipping department. The stenographer, Miss Dixon, has also added to

the general efficiency and reliability of the work since her connection with the laboratory.

My thanks are especially due to the State Health Officer, whose confidence and co-operation has been so manifest through the year.

Very respectfully submitted,

HENRY HANSON,  
*Senior Bacteriologist.*

## REPORT OF DR. G. H. SIMON, BACTERIOLOGIST

TAMPA, FLORIDA, January 1, 1912.

*Tampa Laboratory*

*Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Florida.*

Dear Doctor:—I take pleasure in submitting to you my annual report for the year 1911.

I have attempted to arrange the figures of the report in such a manner that the nature, numbers and results of examinations can be seen at a glance.

The physicians of Tampa and the adjoining territory have availed themselves of the privilege granted them by the State Board of Health of having specimens of communicable diseases examined, in even larger numbers than during the year 1910.

It will be seen by comparing the report from this laboratory for 1910 with that of the year just past, that the number of specimens examined has been more than doubled. The total number of examinations for 1911 has been 7,869, while the number examined in 1910 was 3,386.

I wish to state, without any desire to complain or seek praise, that this large volume of work has only been accomplished by considerable overtime having been put in by Dr. Benson and myself. A laboratory examination to be of greatest value to the physician submitting the specimen, should be done promptly. This during the past year has not always been possible, on account of the large number frequently received at one time. As a rule the physicians have been patient and considerate, but I believe that it will be appreciated by them if delays can be reduced to a minimum.

Considerable of our time is consumed in doing clerical work, recording specimens received, mailing reports, correspondence, etc. This time could be devoted to greater advantage in strictly laboratory work, if someone was appointed to relieve us of these clerical duties.

I believe it is the plan of the State Health Officer to have the offices of the local Agent of the State Board of Health for Hillsboro County, located in the laboratory building.

It is my opinion that one secretary or stenographer could satisfactorily do the work of both Dr. Bartlett and the laboratory.



In the interest of the work here in Tampa, and with the idea of making this laboratory more efficient in the future, I would respectfully recommend that such a secretary or stenographer be authorized, whose duty it would be to take care of the correspondence and keep the records for both the local Agent and the laboratory.

Yours respectfully,  
G. H. SIMON, M. D.,  
*Bacteriologist.*

STATEMENT OF SPECIMENS EXAMINED IN THE TAMPA  
LABORATORY, 1911

Material Examined	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals	Totals Grand
Animal Parasites:														
Hookworms,														
Positive -----	28	17	14	36	21	38	60	28	53	59	26	29	409	
Negative -----	42	68	61	63	61	56	61	37	60	64	46	63	682	
Amoeba,														
Positive -----	--	--	2	--	--	1	--	--	--	--	--	3	6	
Negative -----	--	--	1	1	1	2	1	--	--	1	4	4	15	
Ascaris lumbricoides,														
Positive -----	2	3	2	1	--	3	6	2	3	4	3	4	33	
Lamblia intestinalis,														
Positive -----	--	--	--	--	--	--	--	3	--	--	--	3	6	
Strongyloides intestinalis														
Positive -----	--	--	--	--	--	--	--	--	--	--	4	--	4	
Tapeworms,														
Positive -----	2	8	2	2	4	1	--	1	--	1	--	6	27	
Negative -----	--	--	2	--	1	1	--	--	--	1	--	--	5	
Trichiuris,														
Positive -----	5	5	7	4	14	6	3	3	6	8	4	4	69	1,252
Diphtheria:														
Positive -----	3	6	5	1	--	4	2	6	6	6	15	21	75	
Negative -----	23	26	19	18	15	18	13	16	21	14	21	56	260	
Doubtful -----	--	--	--	--	--	--	--	--	--	2	3	4	9	344
Gonorrhea:														
Positive -----	6	16	9	12	10	12	10	11	23	18	7	10	144	
Negative -----	8	11	16	9	13	14	10	17	9	13	8	6	134	
Doubtful -----	--	--	2	--	1	1	--	--	--	--	1	--	5	283
Malaria:														
Positive -----	106	111	167	164	143	98	62	45	33	60	64	33	1,086	
Negative -----	87	104	155	172	237	269	224	230	225	211	188	154	2,256	
Doubtful -----	--	1	3	4	--	2	1	4	1	--	2	1	19	3,361
Pathological specimens:														
Positive -----	--	1	--	1	--	--	--	1	--	2	--	2	7	
Negative -----	--	--	2	1	1	--	--	--	1	--	--	1	6	13
Tuberculosis:														
Positive -----	29	23	25	36	26	25	8	13	26	13	11	18	253	
Negative -----	53	49	65	64	72	51	43	37	46	52	48	40	620	
Doubtful -----	--	--	--	--	--	--	--	--	--	--	--	1	1	874
Typhoid:														
Positive -----	20	16	26	34	32	48	36	23	17	15	8	13	288	
Negative -----	44	45	98	142	153	177	132	99	104	71	58	60	1,183	
Incomplete reactions	5	4	6	8	6	26	25	8	1	5	3	3	100	1,571
Blood counts:														
Differential -----	2	4	--	1	--	--	--	--	1	--	1	2	11	
Plain -----	5	3	1	4	2	--	--	--	2	--	--	2	19	30
Leprosy:														
Positive -----	--	--	1	--	--	--	--	--	--	--	--	--	1	
Negative -----	--	--	--	1	--	--	--	--	--	1	1	--	3	4
Ophthalmia:														
Positive -----	--	--	1	--	--	--	--	--	--	--	--	--	1	
Negative -----	--	--	--	1	1	2	--	--	--	--	--	--	4	5
Urinary analyses	33	20	11	1	--	--	--	--	4	4	4	6	--	83
Cultures from pus	3	--	3	--	--	--	--	1	--	2	--	--	--	9
Filaria Bancrofti:														
Positive -----	--	--	--	--	--	--	--	--	--	--	1	--	1	
Negative -----	--	1	--	--	--	--	--	1	--	--	--	--	2	3
Spirochaeta pallida:														
Positive -----	--	--	--	--	--	--	--	--	1	--	--	--	1	
Negative -----	--	1	--	--	--	--	--	--	2	--	--	--	3	4
Diazo reaction	--	--	--	--	--	--	--	2	2	--	--	--	--	4
Actinomyces, Negative	--	--	--	1	--	--	--	--	--	--	--	--	--	1
Miscellaneous	--	6	--	10	4	--	3	2	--	--	--	3	--	28
Totals	506	549	704	792	817	854	700	590	647	627	531	552	--	7,869

# REPORT OF DR. F. A. BRINK, BACTERIOLOGIST

Pensacola Laboratory

PENSACOLA, FLORIDA, January 1, 1912.

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Florida.

DEAR DOCTOR: I transmit herewith a tabular statement of specimens examined in this Laboratory during 1911.

The writer has endeavored to examine all specimens thoroughly, carefully and promptly, and to report on them without delay and, so far as can be learned, the patrons of the laboratory have been almost universally pleased. Still the laboratory is not examining as many specimens as could be handled nor as many as we have hoped to handle.

It is quite probable that there are several factors that work against the popularity of this laboratory. For example, there are several doctors in this part of the state who are progressive enough to be treating hookworm disease extensively, but they are also progressive enough to find it convenient to examine their own specimens. Then there are doubtless many practitioners and whole communities that are not giving this subject proper consideration. However, I believe that the laboratory has come to be depended upon largely by the physicians who do patronize it regularly, and that there are many who appreciate the action of the State Board of Health in maintaining a laboratory here.

We plan to widen the field of usefulness this year by making as thorough a study as possible of the incidence and distribution of typhoid in this place, with special reference to the proximity of the cases to unsanitary closets, breeding places of flies, screening of houses, etc. The City Health Officer and all physicians, as well as the local health league, will be called upon to help in this work and an effort will be made to abolish the open closet.

Trusting that this laboratory may measure up to the hopes of the Board in promoting the public health, I am

Respectfully,

F. A. BRINK, M. D.,

Bacteriologist.

## STATEMENT OF SPECIMENS EXAMINED IN THE PENSACOLA LABORATORY, 1911

Material Examined	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Grand Totals
Animal Parasites:														
Hookworms:														
Positive	29	12	19	35	19	15	6	26	35	30	4	20	250	
Negative	52	10	17	17	10	17	14	17	14	20	6	15	209	
Unfit for examination									1				1	
Asearis lumbricoides						1		1					3	
Oxyurias vermicularis					1		1						2	
Strongyloides intestinalis			2										2	
Tapeworms				1						1			2	
Trichomonas vaginalis					1								1	
Mange mites											2	1	3	
Tricocephalus dispar											1		1	
Unidentified eggs						1							1	475
Diphtheria:														
Positive	3		2	1				2	4	4	5	2	23	
Negative	17	8	3	3	2		2	7	7	6	17	4	76	99
Gonorrhea:														
Positive		4	4	1	12	7	3	6		4	6	5	52	
Negative	4	8	6	3	15	6	3	6	3	4	4	4	66	
Unfit for examination	1				1								2	120
Influenza, Positive												1		1
Malaria:														
Positive	1			1	3	3	6	2	3	7	2	1	29	
Negative	10	10	9	9	11	20	17	26	26	15	25	23	201	
Unfit for examination					1						1		2	232
Rabies, Dog, Negative					1									1
Tuberculosis:														
Positive	3	3	7	7	11	3	11	6	5	6	4	1	67	
Negative	14	12	20	18	15	8	15	7	10	17	17	12	165	
Unfit for examination									1				1	233
Typhoid:														
Positive	2	4	2	4	10	3	5	8	7	8	4	3	60	
Negative	3	3	7	10	12	15	14	18	21	5	13	7	128	
Incomplete reaction			1	1	5		1		1		2		11	199
Water for sewage contamination:														
Positive						1							1	
Negative					1	2	4			1			8	9
Animal inoculation (rabies)														
Negative						1								1
Blood examinations					5	1	4	3	2	2	2	17		36
Urinary analyses	36	39	46	30	11	18	13	10	22	7	14	14		260
Miscellaneous specimens	10	44	18		4	24	9	2	5	3	3			122
Total	185	157	163	141	151	146	128	147	167	141	132	130		1,788



## REPORT OF THE VETERINARY DIVISION

### A SUMMARY OF DETAILS AND WORK ACCOMPLISHED DURING 1911, PREVIOUS TO THE EMPLOYMENT OF DR. CHARLES F. DAWSON, VETERINARIAN

During the month of January, the veterinarian, Dr. Thomas J. Mahaffy, investigated reported cases of glanders in Putnam County, Lafayette County, Citrus County and Hillsboro County, all of which were found to be negative. During the months of January, February and March Dr. Mahaffy, with the assistance of Dr. J. G. Burneson, of the Bureau of Animal Industry, managed an outbreak of glanders in Alachua County, a detailed report of which will be found on page 81 of this Annual Report.

Upon the resignation of Dr. Mahaffy on April 10th, glanders being that date reported at Tampa, the State Health Officer was fortunate in securing the services of Dr. W. P. Link of that city to serve as veterinarian of the State Board of Health in the investigation of the disease, and the following tests and condemnations were made by Dr. Link:

April 18th, Hillsboro County, Tampa, 1 horse tested and diagnosed as glandered. Clinical symptoms also present.

April 25-26th, Hillsboro County, Tampa, 60 horses and mules were tested, none of which reacted to the test.

April 21st, Polk County, Haines City. Eight horses and mules were tested, five of which were diagnosed as glandered and condemned.

May 12th, Hillsboro County, Tampa. One mule tested, diagnosed as glandered and condemned.

June 4th, Hillsboro County, Tampa. One horse tested, diagnosed as glandered and condemned.

June 15th, Hillsboro County, Tampa. One horse tested, diagnosed as glandered and condemned.

On July 4th glanders was reported at Kissimmee, Osceola County; and Dr. Hiram Byrd, Assistant State Health Officer, being in that vicinity, was instructed by the State Health Officer to investigate the report. The mallein test was applied to thirty animals, one of which reacted, was diagnosed as glandered, and was condemned.

On July 22nd and 23rd, glanders was reported near Bonifay, Holmes County, and in the absence of a veterinarian to detail to that point, Dr. Byrd was sent over there. Twenty-one horses and mules were inspected, 16 of which were given the mallein test; one reacted to the test, and 3 were diagnosed from clinical symptoms as being glandered, and the four animals were condemned.

On July 29th Dr. R. M. Buffington reported to the office, having been appointed veterinarian of the State Board of Health. The administration of hog cholera serum was at once taken up actively, and the work accomplished in the several counties of the state can

On August 1st and 4th glanders was reported at Caryville, Washington County, and Dr. Buffington was detailed to that point. On August 8th six animals were tested, none of which reacted to the test. One other animal was condemned as glandered, the diagnosis being based upon clinical symptoms.

On August 19th the office was informed of glanders again at Bonifay, Holmes County. It was not possible for the veterinarian to reach that point until September 26th, during which time the suspected animals had been isolated by the owner upon instructions from the State Health Officer. Upon the arrival of the veterinarian at Bonifay, and an inspection of the animals, two were condemned, the diagnosis being based upon clinical symptoms. One other mule which was tested did not react.

On September 11th Dr. W. P. Link of Tampa was requested to investigate suspicious cases of glanders reported at Auburndale, Polk County. The animals were inspected the next day, but it was found that the animals were not suffering with glanders.

On October 4th Dr. W. P. Link was wired to assume control of a reported occurrence of glanders in a stable at Tampa, Hillsboro County. The mallein test was applied to seven animals that date, none of which reacted. Another animal was diagnosed, upon clinical symptoms, as being glandered and was condemned.

On October 7th suspicious glanders was reported near Kissimmee, Osceola County. An investigation by Dr. W. P. Link resulted in a diagnosis of influenza.

November 1st Dr. Charles F. Dawson reported at the office for service as veterinarian of the State Board of Health, and since that time, with the assistance of Dr. W. P. Link of Tampa and Dr. J. W. DeMilly of Tallahassee, as assistant veterinarians, has been conducting the work against hog cholera.

On November 23rd and 24th Dr. Dawson also investigated reported glanders near Bonifay, Holmes County. The suspected animals were found just across the line in Washington County. One mule was condemned and destroyed, diagnosis of glanders based upon clinical symptoms. Another animal was tested and found free of the disease.

## REPORT OF DR. CHAS. F. DAWSON, VETERINARIAN

JACKSONVILLE, FLORIDA, January 1, 1912.

*Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Florida.*

DEAR DOCTOR: I have the honor to acknowledge the receipt of your letter, in which you say:

I wish you would prepare for the 1911 Annual Report of the State Board of Health, in addition to an account of the work performed by you during 1911, for the Board, a sort of "veterinary discussion." I realize full well that having just returned to the state, it could not be expected that you would prepare an annual report of the complete operations of the veterinary division for 1911, or anything of that kind, but what I would like in particular is that you discuss in a general way the following subjects:

Hog cholera, with special reference to the *modus operandi* of its transmission and prevention, the underlying methods or principles of administering hog cholera serum, the difficulties in the way of carrying it into effect to best advantage, etc.:

Glanders, with such comment as you may wish to make;

Texas fever among cattle; and

Hookworm disease among cattle; and any other phase of the veterinary division's work that may appeal to you.

### HOG CHOLERA

In reply, I may say that it is unquestionable that the animal disease in which the farmer is most interested to-day is hog cholera. Interest in this disease has been increased by the discovery of a serum which, when injected under the skin of hogs exposed to hog cholera, or of those suffering from a recent attack of the disease, will prevent them from contracting hog cholera and also cure those recently infected. As the hog is one of the most prolific of the farm animals, is especially adapted to Florida conditions, matures early, costs little to raise, finds a ready market at good prices, there is little wonder that a successful treatment that requires but one dose of medicine injected under the skin has taken like wildfire with the farmer. Many persons are kept out of the hog business because they know they are liable to lose all or a large percentage from cholera. Most farmers would raise twice as many hogs if they could be assured that cholera could be successfully combated. It has been said that cholera is the main reason for pork remaining high in price. If pork could be reduced in price, the price of beef and other meats would have to meet this competition.

That this serum treatment for hog cholera is a grand success needs no further confirmation than the fact that it was perfected and is recommended by the Federal Bureau of Animal Industry,



and that many business concerns are now going to the expense of establishing serum-production plants and are unable to supply the demand for the serum. The writer has had considerable experience in the production, testing and field-application of the serum and can testify to its efficacy. Indeed, so sure is he in its protective and curative influences that the statement can be definitely made that in cases where the serum seems not to be effective, the fault lies either with the operator in not giving a sufficient dose, or with the manufacturer in not preparing a potent serum, or the disease in which it is being used is not hog cholera.

The Florida Legislature of 1911, in its wisdom, passed the following bill:

Chapter 6167 (No. 48).

An Act to Establish, Maintain and Operate a Hog Cholera Serum Plant, to Authorize the State Board of Health to make Rules for the Protection and Distribution of Said Serum.

*Be it Enacted by the Legislature of the State of Florida:*

Section 1. The State Board of Health is hereby authorized and empowered to establish, maintain and operate a plant for the protection and distribution of Hog Cholera Serum for the purpose of distribution to the farmers of this state upon application therefor.

No cost shall be charged by the State Board of Health for the Hog Cholera Serum so desired.

Sec. 2. This act shall go into effect upon its passage and approval by the Governor, or upon its becoming a law without his approval.

Approved June 3, 1911.

While it will be seen that the Florida State Board of Health is not, by the above law, *directed* to do anything but is simply *authorized and empowered*, yet it has gone ahead and endeavored to help the farmer out on the hog cholera question by the use of serum, as though it were specifically *directed* to do so. It has thus gone upon record as willing to divert some of the funds appropriated for general sanitation to the stamping out of a porcine disease.

The State Board of Health has not "established, maintained and operated a plant for the production and distribution of hog cholera serum," because hog cholera serum can now be purchased at a price which, all expenses considered, is possibly less than that for which the state could produce it, and because the law left it optional with the Board in not *directing* that these things be done.

The method of distribution and application of the serum has been carried out according to the following form which is sent to each applicant. This application blank must be filled in and returned to the State Health Officer before action upon the application is taken.

Florida  
State Board of Health  
Form 217

Number of Application and Agreement .....

STATE BOARD OF HEALTH OF FLORIDA

VETERINARY DIVISION

APPLICATION FOR ADMINISTRATION OF HOG CHOLERA SERUM

....., Fla., ....., 191..

Postoffice

Date.

I hereby make application for the administration of hog cholera serum sufficient to immunize .....hogs.

Average weight of hogs ..... Estimated market value of hogs today.....

Number of deaths during past thirty days among my hogs, caused by hog cholera .....

Number of hogs now on hand .....

Approximate number of hogs sick at present time .....

At what time did hog cholera appear among your hogs? .....

Does the disease appear to be general? .....

Does the disease exist on neighboring farms?.....or nearby towns?....

Signature .....

Owner-Applicant.

AGREEMENT

It is hereby understood between the Owner-Applicant and the State Board of Health of Florida, that the said State Board of Health is distributing and administering this serum, free of charge to the farmers of the state, in compliance with Chapter 6167, Laws of Florida, 1911, and although recommending the administration of hog cholera serum as a preventive of hog cholera, does not guarantee the vaccination of hogs against cholera as an absolute protection; and that so far as the State Board of Health is concerned, the merits of the vaccination, as at present established, must be the sole recommendation for its use.

The Owner-Applicant further agrees and promises to report the result of the treatment or vaccination to the State Health Officer of Florida, at Jacksonville, once each week for four weeks.

Signed .....

Owner-Applicant.

NOTICE

Upon the receipt of the above application, properly filled in and signed, the State Health Officer of Florida will detail one of the veterinarians of the State Board of Health to visit the applicant and administer hog cholera serum to his herd, at as early a date as possible.

It will expedite matters if individual owners, when making application for this serum, will also advise whether or not there are any of his fellow townsmen or neighbors who desire their hogs to be vaccinated in a similar manner.

The State Board of Health cannot and does not recommend the administration of this hog cholera serum except by a skilled veterinarian.

The state law providing for the distribution of this serum also provides that no charge shall be made for it. The services of the veterinarian are likewise a charge against the State Board of Health.

Additional copies of this form will be furnished promptly to citizens of Florida desiring this service.

Address all communications to Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Florida.

When the applicant has complied with the necessary rules, an agent of the Board, or rather veterinarian, is sent to the point and the serum is administered. At this time certain information as to the number of hogs treated, their weights, the quantity of serum used, etc., is noted upon a blank form and returned to the office, by the operator. Later, a blank form is sent the owner with the request that he record certain information as to the beneficial effects, or otherwise, of the serum. It is only in this way that the Board can arrive at a conclusion as to the value of the serum treatment and as to the efficacy or potency of a particular serum it has purchased.

The forms mentioned are as follows:

STATE BOARD OF HEALTH OF FLORIDA  
VETERINARY DIVISION  
REPORT ON ADMINISTRATION OF HOG CHOLERA SERUM

Name of Owner \_\_\_\_\_ County \_\_\_\_\_  
Postoffice \_\_\_\_\_ Fla. Date \_\_\_\_\_ 191\_\_\_\_  
Laboratory Serum No. \_\_\_\_\_

Weight of pigs	Dose to be given	Number treated	Number not Treated	Number Living		Number Sick	
				Treated	Not Treated	Not Treated	Treated
Small pigs	10-15 c.c.						
30- 50 lbs.	20 c. c.						
50- 75 lbs.	25 c. c.						
75-125 lbs.	30 c. c.						
125-175 lbs.	35 c. c.						
175-225 lbs.	40 c. c.						
225-275 lbs.	45 c. c.						
275-325 lbs.	50 c. c.						
325-375 lbs.	55 c. c.						
375-425 lbs.	60 c. c.						
425-475 lbs.	65 c. c.						
475-525 lbs.	70 c. c.						

several places.

For sick hogs double the dose. In all cases of large doses, small quantities in Cubic centimeters of serum used \_\_\_\_\_ in vaccinating the herd of \_\_\_\_\_

Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Veterinarian State Board of Health.

STATE BOARD OF HEALTH OF FLORIDA  
VETERINARY DIVISION  
REPORT BY OWNER AFTER ADMINISTRATION OF HOG  
CHOLERA SERUM

Name of owner \_\_\_\_\_ Number of Application and Agreement\* \_\_\_\_\_  
Address \_\_\_\_\_ Fla. Date \_\_\_\_\_ 191\_\_\_\_  
\*Weekly Report after the administration of Hog Cholera Serum  
to \_\_\_\_\_ Hogs of above-named owner.

Weight of Pigs	Number Treated	Number not Treated	Results After Treatment		
			Number Living	Number Sick with Hog Cholera	Number Dead From Hog Cholera
Small pigs					
30- 50 lbs.					
50- 75 lbs.					
75-125 lbs.					
125-175 lbs.					
175-225 lbs.					
225-275 lbs.					
275-325 lbs.					
325-375 lbs.					
375-425 lbs.					
425-475 lbs.					
475-525 lbs.					

Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Owner.

Hog cholera first appeared in Florida in 1840. It first appeared in the United States, in Ohio, in 1833. It may, therefore, be said to be a new disease when compared historically with glanders or anthrax, which diseases are as old as human history. It is hard to see, however, how bacterial diseases can be new. Why haven't they always existed? What modern conditions brought about a germ that would cause such a disease in hogs? If, perchance, it was imported from Europe, when did it begin operations there? The writer does not accept that any bacterial disease is new, any more than any of the higher plants are new. What process led up

\*The number of application will be inserted at the office of the State Board of Health.

†The owner should insert whether this is the "first," "second," "third," or "fourth" weekly report after the administration of the serum.



to the production of the oak tree with its peculiarities? Explain this and we can understand how certain unicellular plants, some of which we know as bacteria, have the property of producing fatal diseases in plants and animals.

Leaving the purely speculative and returning to the practical side of the question of hog cholera, we describe the disease as existing only in hogs and in two forms, viz., the acute and the chronic. In the acute form the animals die suddenly, so suddenly in some cases that the farmer thinks his hogs are being poisoned. They may, however, live a week or ten days. During this time they are off feed, and this the first symptom; weak in the loins, staggering in gait, are constipated or diarrheic, have cough, hide away, and exhibit tenderness of the joints when handled. The eyes matter, they cough and sometimes vomit. In hogs of light complexion spots or areas may be seen on their bellies. When, in a week or ten days, they die, a *post mortem* examination will show small blood spots or specks on the kidneys. The heart will show bloody blotches upon its surface also.

In the chronic form of the disease (and this is the form the farmer knows most about), all the foregoing symptoms are present except they are less intense. When the hog, dead from chronic hog cholera, is cut open for examination, we frequently find considerable lung disease and, above all, we find the intestines diseased, especially where the large and small intestines join at the ileo-cæcal valve; then if the bowel is cut open, we shall find button-shaped ulcers, or ulcers raised above the common level of the mucous layer of the bowel. *These are absolutely indicative of chronic hog cholera.*

*In a general way it may be said that when hogs of all ages are dying of an epizootic disease, that that disease is hog cholera.*

Now that state sanitarians have been provided with a very effective serum for the prevention and treatment of hog cholera, it only remains for us to adopt these methods which will bring about the application of the remedy in the shortest time possible after the discovery of an outbreak of the disease. It is well known that all communicable diseases run their course and gradually die out. Hog cholera is no exception to this general rule. It is the duty of sanitarians to step in and cut short and abort such diseases by the use of their respective anti-sera. Therefore, it is very important that the State Board of Health adopt such plans as will get the operator on the ground as soon as possible after they have been requested

to treat hog cholera at a certain point. To this end the writer recommends the appointment in every county seat of a person well qualified to administer the anti-hog cholera serum. In every such town there are persons who have a natural tact for such work, persons who are well known throughout the community. They should be known as Live Stock Sanitary Agents of the State Board of Health, and when hog cholera breaks out in a community, the Agent resident in that community can go at once to the scene of the disease and apply the remedy, upon a telegraphic order from the Executive Office in Jacksonville.

The expense attending such procedure would probably not be greater than in sending a few men from different parts of the state over long distances to reach a given locality. These Live Stock Sanitary Agents should be paid a per diem salary with actual traveling expenses allowed, and should be recommended because of their special fitness and adaptability for the work, by prominent citizens.

The following is a table giving the statistics upon the serum treatment of hog cholera compiled in the Executive Office from the data on file, to January 1st, 1912.

ADMINISTRATION OF HOG CHOLERA SERUM  
1911, BY COUNTIES

County and Month	No. of Hogs Immunized	Estimated weight of Hogs	C. c. of Serum used	Cost of Serum
Alachua, August	88	6,600	1,420	\$ 49.70
September	33	3,100	660	23.10
November	24	1,200	320	11.50
December	54	4,700	1,125	39.38
Total	199	18,600	3,525	123.68
Bradford, September	123	12,300	2,480	86.80
Calhoun, December	21	2,900	695	17.38
DeSoto, October	17	2,375	425	14.88
November	53	3,095	700	24.50
Total	70	5,470	1,125	39.38
Duval, September	19	2,850	400	14.00
November	2	225	60	2.10
December	18	2,750	819	20.47
Total	39	5,825	1,279	36.57
Gadsden, September	1,087	55,830	11,060	387.10
December	105	12,200	4,000	100.00
Total	1,192	68,030	15,060	487.10
Hamilton, December	59	6,450	2,490	62.25
Hillsboro, September	43	4,300	860	30.10
October	101	8,800	1,750	61.25
November	102	8,500	1,900	66.50
December	10	2,500	500	12.50
Total	256	24,100	5,010	170.35
Holmes, December	30	2,940	1,084	27.10
Jackson, November	45	3,375	420	10.50
Jefferson, November	185	18,600	4,100	102.50
December	37	9,305	2,060	51.50
Total	222	27,905	6,160	154.00
Lafayette, October	229	21,500	1,650	57.75
November	703	38,450	11,305	339.15
December	214	13,085	5,112	127.75
Total	1,146	73,035	18,067	524.65
Leon, September	274	13,725	2,100	73.50
October	1	200	50	1.75
December	161	17,425	4,100	102.50
Total	436	31,350	6,250	177.75
Levy, August	59	5,500	1,180	41.30
Madison, November	33	2,475	250	8.75
Marion, November	62	3,055	918	32.13
Orange, August	20	1,600	400	14.00
Pinellas, November	23	1,650	460	16.10
Polk, September	67	6,750	1,350	47.25
October	43	4,050	710	24.85
November	7	500	100	2.50
December	25	2,850	600	15.00
Total	142	14,150	2,760	89.60

ADMINISTRATION OF HOG CHOLERA SERUM—Continued

County and Month	No. of Hogs Immunized	Estimated weight of Hogs	C. c. of Serum used	Cost of Serum
Sumter, September	68	6,350	1,400	49.00
October	312	28,060	5,790	173.70
November	31	1,300	250	6.25
Total	411	36,710	7,440	228.95
Suwannee, September	67	7,000	1,340	33.50
November	33	2,800	300	7.50
December	22	1,650	350	8.75
Total	122	12,450	1,990	49.75
Taylor, October	171	9,500	1,250	43.75
December	275	24,325	5,530	138.25
Total	446	33,825	6,780	182.00
Grand Totals				
No. of hogs immunized	5,156			
Estimated weight of hogs		393,695		
Cubic centimeters of serum used			85,823	
Cost of serum				\$2,589.00

Number of hogs immunized, by months:

August	167
September	1,731
October	874
November	1,303
December	1,071
Total	5,156



## GLANDERS

Glanders is a dangerously contagious, constitutional disease of the horse, ass and mule, readily communicable to man, the dog, the cat, the rabbit and the guinea pig. The Latin names for it are *Malleus humidus*, *Equina nasalis*, *Equina apostematos*. The Germans call it *rots*, or *rotskrankheit*. The Dutch call it *snot*, or *verrotting*. It is the *moccio*, or *ciamorro*, of the Italians, *mucrho* of the Spaniards, and *morve*, or *farcin*, of the French.

Glanders is one of the oldest diseases of which we have record, in the history of medicine. Absyrtus, a Greek veterinarian, who lived about 300 A. D., and who was veterinarian to the army of Constantine the Great, left an accurate description of the disease, and recognized its contagious nature. Gersault, in 1746, said "that as this disease is communicated very easily, and can infect in a very short time a prodigious number of horses (mules, asses) by means of the discharge which may be licked up, animals infected with glanders should be destroyed."

Glanders is pre-eminently a disease that has followed in the wake of armies of invasion. It first appeared in America in about the year 1800. It was introduced into Mexico by the diseased horses of the United States Army during the Mexican War. It was spread over the Southern States during the Civil War.

Glanders is recorded as having first appeared in Florida among horses of the U. S. Army, in 1898. There is no record of its existence between the years 1898 and 1903, when it reappeared in DeSoto County. Since 1903 it has been continuously present in Florida, sometimes existing to an alarming extent in certain localities. There can be little doubt but that the date of the first appearance of glanders in Florida would coincide with the first importations of horses from the Western horse ranches, or from the large horse markets of the large cities.

Glanders may exist either as an acute or as a chronic disease. It is in the acute form that we find the symptoms most urgent and the contagion most virulent, as can be shown by experiments in which susceptible animals invariably succumb to artificial injection, while similar animals inoculated with nasal discharges or infectious material from the ulcers in chronic cases, may, at times, escape fatal infection. This is, no doubt, the explanation as to why comparatively so few persons who handle and nurse horses affected

with chronic glanders become infected. In the acute form the animal is visibly sick, and repulsive to the owner or attendant, and more care is exercised, even though the nature of the disease is unknown to them. On the other hand, it is really the chronic form of the disease that finally proves the more dangerous and the more frequent means of dissemination. An animal affected with chronic glanders is, in ignorance of the existence of the disease, allowed the free run of the stable. It drinks from the common trough, works hitched up with first one animal and then another, and thus over a period of a year or more may infect a large percentage of its associates, who may develop the disease in an acute form and die of a disease the identity of which is unknown to the owner. Several animals may thus succumb before the veterinarian is called in. The disease is transmitted by the direct contact of the nasal discharges from an infected animal with the tissues of a sound animal, either on the outside of the body or when swallowed, mixed with the food, or when inhaled with contaminated dust, the latter probably being the least frequent mode of transmission. There can be no question but that stable attendants are a very frequent carrier of the contagion from sick to sound animals, the means being infected hands, feed, harness, clothing, curry comb, bridle and halter.

A horse may be afflicted with glanders for several years without the disease being apparent, as is shown by this experience of a practitioner of veterinary medicine. He says, "An old gray mare belonging to a tavern keeper was reserved for family use, with good care and light work, for a period of eight years, during which time other horses in the tavern stable were from time to time affected with glanders without an apparent cause. The mare, whose only trouble was an apparent attack of heaves, was sold to a huckster, who placed her at hard work. Want of feed and overwork and exposure developed a case of acute glanders, from which the animal died."

We thus see that an old chronic case of glanders kept under good treatment will not show the disease, but may infect others, and that such an animal changing owners and put to hard work will develop the acute form of glanders and die.

The writer could cite other instances like the above. Hence, it is the old chronic cases of glanders that, in the end, prove the more dangerous. How important it is, then, that in eradicating



glanders we have a test that will pick them and with almost unerring certainty. Even admitting that mistakes may be made, is it not better to err on the safe side and rid the community of a horse of this kind, than to allow them to go on scattering this loathsome disease among other stock and possibly infecting human beings?

As has been before stated, it is the animals of the genus *Equus*—the horse, the ass and the mule, that contract glanders most readily, the greater receptivity being in the mule and ass. In the horse the disease starts, in ninety per cent. of the cases, as a chronic disease, which becomes generalized and acute when the animal is subjected to devitalizing influences, as noted above. In the mule, glanders starts as an acute disease, in ninety per cent. of the cases, and kills the animals in from three days to two weeks.

In all our dealings, especially with horses, it is proper to view with suspicion any horse that is suffering with a discharge from the nostrils, especially when from one nostril, and when there is a lump or swollen glands between the jaw bones. Such swelling feels hard and nodular, the skin moves easily over it and it seems attached to the bone or under side of the tongue. There is another form in which glanders manifests itself, and that form is known under the name farcy or glanders of the skin. It manifests itself by the formation of nodules under the surface. These rapidly come out on the surface, producing ulcers with ragged edges, with a gray, dirty bottom, which discharge a sticky, yellowish material, resembling olive oil, and which causes the surrounding hair to mat together. Scabs thus form, which become thicker and thicker by successive deposits of the discharge. This may go on for days or even weeks, but they eventually change into an ordinary ulcer and heal rapidly, leaving the affected part more or less denuded of hair. This whole process is nothing more nor less than a specific inflammation and destruction of the skin lymphatics and is just as truly glanders as the other forms described, and they frequently co-exist. These farcy buttons, or buds, as they are called, occur most frequently on the sides of the lips, neck, shoulders, inside the thighs, but may occur on any part of the body.

As will be understood from reading the foregoing, there are cases of glanders that present much difficulty in our efforts at diagnosis by mere inspection. Fortunately, in mallein, we have a substance which will pick out all these doubtful cases for us.

Mallein is made by growing the germ of glanders in glycerinated beef tea. Such cultures are then boiled to kill the germ. The dead germs are then filtered off and the resulting liquid is then evaporated down to one-tenth of its original bulk. It contains the poison which the germs of glanders produced by their growth, and it is this poison which, when injected into an animal suffering with glanders, causes the animal to have a fever and a swelling at the place it was injected. In animals not suffering with glanders no such manifestations occur. One very important property mallein has is that it may not produce fever or swelling in cases of glanders that can be readily diagnosed by the veterinarian upon physical inspection. On the other hand, the temperature of such animal may be decreased.

The following very comprehensive law was enacted by the Florida Legislature of 1909 and approved by the governor June 8, 1909. It confers ample powers upon the State Board of Health to prevent, suppress and control any dangerous, contagious and infectious disease in domestic animals and live stock.

#### CHAPTER 5933 (No. 64).

An Act to Provide for the Prevention, Suppression and Control of Dangerous, Contagious and Infectious Diseases in Domestic Animals and Live Stock, and to Impose Certain Duties and Confer Certain Powers on the State Board of Health for Such Purposes.

*Be it enacted by the Legislature of the State of Florida:*

Section 1. That it shall be the duty of the State Board of Health of the State of Florida to protect the health of domestic animals and live stock of this state, and to determine and employ the most efficient and practical means for the prevention, suppression, control and eradication of dangerous, contagious and infectious diseases among such animals and live stock. That glanders, anthrax, blackleg, or blackquarter, contagious pleuro-pneumonia, or lung plague, of cattle; rinderpest, or cattle plague, hemorrhagic septicaemia, foot and mouth disease, or aphthous fever of cattle, Southern cattle fever, or Texas fever, sheep scab, mange of cattle or horses, hog cholera, or swine plague, rabies, or hydrophobia, maladie de coit, or eldurine, of horses; advanced or generalized tuberculosis, or tuberculosis of the udder, and all other diseases of domestic animals or live stock which shall, by rule of the said State Board of Health be pronounced, defined and declared to be contagious or infectious and dangerous to the life of other domestic animals or live stock, or to human beings, are hereby declared to be nuisances.

Sec. 2. That it shall be the duty of all practitioners of veterinary medicine, and of the owner of any animal or live stock afflicted with or suffering from any of the diseases mentioned in Section 1 of this act, or pronounced, defined or declared by rule of said State Board of Health pursuant to the provisions of said Section 1, immediately upon gaining information of the existence of any such disease in or among such domestic animals or live stock, to report the same to the State Health Officer of the State of Florida. All such reports shall be in writing and shall describe the diseased animal or live stock, and shall give



the name and address of the owner or person in charge thereof, and the place where the same are kept.

Sec. 3. That no person who has knowledge of the existence of any of the contagious or infectious diseases in or among domestic animals or live stock enumerated in Section 1 of this act, or pronounced, declared and defined by said State Board of Health as aforesaid, or who shall have knowledge that any such animal or live stock is afflicted with or suffering from any such disease, shall conceal or attempt to conceal such diseased animal or live stock or knowledge of such diseased animal or live stock, from the State Health Officer or the veterinarian of the State Board of Health, or any other officer, representative or agent of said State Board of Health, or shall remove or attempt to remove such animal or live stock from the reach, care or control of such State Health Officer, veterinarian of the State Board of Health, or any officer, representative or agent of said State Board of Health.

Sec. 4. That it shall be unlawful for any person to move upon or across any public highway, or to expose to contact with other animals, or to take, carry or leave in any public place any animal or live stock known to be suffering or afflicted with any of the contagious or infectious diseases enumerated in Section 1 hereof, or pronounced, declared and defined by said State Board of Health as aforesaid, except by and with the written permission of the said State Health Officer, veterinarian of the State Board of Health, or some other officer, agent or representative of the said State Board of Health.

Sec. 5. That said State Board of Health shall have the power to employ a skilled veterinary surgeon, at a salary to be fixed by said Board, to be known as the Veterinarian of the State Board of Health, who shall have and discharge such duties as may from time to time be imposed upon him by said Board or said State Health Officer, and to employ agents and representatives of said State Board of Health and of said State Health Officer to perform any duties in connection with the administration of this act that may be imposed upon them by said State Board of Health or said State Health Officer from time to time.

Sec. 6. That the said State Board of Health is hereby authorized and empowered to establish, maintain and enforce such quarantine and other measures relating to the care and movements of animals and live stock suffering from or afflicted with any such contagious or infectious disease, and to make, adopt and enforce from time to time such rules and regulations as may be necessary or proper for the enforcement of this act, and to carry out the purpose thereof.

Sec. 7. That the State Board of Health shall by rule provide for a safe and effectual manner for the disposal and destruction of the carcasses of domestic animals or live stock which shall have died from or while afflicted with any of the contagious or infectious diseases enumerated in Section 1 of this act, or pronounced, defined and declared by said State Board of Health, in such a manner as to prevent the continuance or spread of such contagion or infection.

Sec. 8. That it shall be the duty of the State Health Officer, upon being notified of the existence, or suspected existence, of any case of contagious or infectious disease in any domestic animal or live stock enumerated in Section 1 of this act, or pronounced, defined and declared by said State Board of Health under the provisions of said Section 1, to cause said animal or live stock to be examined by said veterinarian of the State Board of Health, or any other agent or representative of said State Board of Health thereunto duly authorized in writing by said State Health Officer, and if, after such examination, the said State Health Officer shall declare said animal or live stock to be infected with any such contagious or infectious disease, the said State Health Officer shall have the power to place such animals or live stock, and all other animals which have been exposed to said contagion or infection, in quarantine during such length of time and under such circumstances as said State Health Officer may

determine to be proper. That said State Health Officer shall have the power to condemn any animal or live stock which he shall so determine to be infected with any contagious or infectious disease, and thereupon it shall be the duty of the owner or person in charge of such animal to kill the same forthwith, and make such disposition of the carcass thereof as may be provided by the rule of said State Board of Health hereunder. That if the owner or person in charge of any such animal or live stock shall refuse to kill said animal or live stock when thereunder required by said State Health Officer, it shall be the duty of the State Health Officer to order the Sheriff, or any Deputy Sheriff, in the county in which said animal or live stock may be, to kill said animal or live stock immediately and dispose of the carcass thereof in the manner prescribed by such rules, and in such case the State Board of Health shall have the right to recover by an action of assumpsit from the owner or person in charge of such animal or live stock, the cost of killing the same and disposing of the carcass thereof as aforesaid.

Sec. 9. That whenever any animal or live stock shall be killed by the owner thereof, pursuant to the orders of said State Health Officer under the provisions of this act, the owner of such animal or live stock shall be entitled to be paid for such animal or live stock by the State Board of Health in the following manner:

The owner of the animal or live stock shall appoint one appraiser, the State Health Officer shall appoint another, and the veterinarian of the State Board of Health shall constitute a third, and such three appraisers so appointed shall upon taking oath, render just and true appraisement of such animal or live stock, proceed to appraise the value thereof, taking into consideration their actual value and condition at the time of such appraisement, and such appraised price shall be paid by the said State Board of Health in the same manner as its other expenses are paid; *Provided*, That no more than seventy-five (75.00) dollars shall be paid for any horse or mule, and no more than fifty (50.00) dollars shall be paid for any other domestic animal which shall be condemned and killed in the manner hereinabove provided; and *Provided further*, That no animal or live stock shall be paid for by said State Board of Health, unless the owner thereof shall first make it appear to the satisfaction of the State Health Officer:

(1) That said animal or live stock shall have been owned and kept in the State of Florida one year previous to its condemnation.

(2) That said animal or live stock contracted the disease for which it had been condemned while in the State of Florida; and

(3) That no person shall be paid for more than ten (10) animals in any one year.

Sec. 10. That the State Health Officer, veterinarian of the State Board of Health, or any authorized representative or agent of the State Board of Health, shall have the right at all times to enter any premises, farms, yards, fields, pens, abattoirs, slaughter-houses, cars or vessels where any domestic animals or live stock are at any time gathered or kept, or wherever the carcass of any such may be, and to determine in such way as may be deemed necessary whether said live stock are or were suffering from the subject of any such contagious or infectious disease.

Sec. 11. That any person or persons who shall violate any provisions of this act, or any rule or regulation of the State Board of Health adopted hereunder, or who shall unlawfully interfere with the State Health Officer, veterinarian of the State Board of Health, or any agent or representative of said State Board of Health, or State Health Officer, appointed under this act, shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine not exceeding one thousand dollars or by imprisonment not exceeding one year, or both, in the discretion of the Court.







## AFFIDAVIT OF TWO DISINTERESTED PARTIES

STATE OF FLORIDA, {  
County of \_\_\_\_\_ }On this day personally appeared before me \_\_\_\_\_  
and \_\_\_\_\_, who, being duly sworn, each for him-  
self made the following statement under oath: I am acquainted with \_\_\_\_\_  
\_\_\_\_\_, known to me to be the owner of the

(Owner)

animal mentioned and described in the foregoing Appraisement Form; I am  
not interested financially, directly or indirectly, in the claim made by the  
said \_\_\_\_\_ upon the State of Florida for

(Owner)

reimbursement, or the proceeds thereof; and that to my knowledge the facts  
set forth in the affidavit of owner and sworn to by him, are true and correct  
in every particular. I further swear that I am not related to said owner by  
blood or marriage, and that I am not interested or engaged in business with  
or employed by him.

Sworn to and subscribed before me at

\_\_\_\_\_ Fla., this \_\_\_\_\_ day

of \_\_\_\_\_ 191\_\_\_\_

(L.S.) \_\_\_\_\_

## STATEMENT OF VETERINARIAN

The \_\_\_\_\_ animal described in the Ap-  
praisement Form herewith were diagnosed by me on \_\_\_\_\_  
(Number) \_\_\_\_\_ was \_\_\_\_\_ (Date) \_\_\_\_\_as infected with Glanders; animal No. \_\_\_\_\_  
were tested with Mallein on \_\_\_\_\_ and gave satisfactory  
was \_\_\_\_\_ (Date) \_\_\_\_\_reaction; animal No. \_\_\_\_\_ gave clinical symptoms of Gland-  
ers in addition to the positive Mallein reaction; animal No. \_\_\_\_\_  
were not tested with Mallein but clinical symptoms were present.was \_\_\_\_\_  
Remarks: \_\_\_\_\_On \_\_\_\_\_ the said \_\_\_\_\_ animal were  
(Date) \_\_\_\_\_ (Number) \_\_\_\_\_ was  
by me ordered to be destroyed; the said \_\_\_\_\_ animal were  
(Number) \_\_\_\_\_ was

(Date) \_\_\_\_\_

\_\_\_\_\_  
Veterinarian, State Board of Health.Dated at \_\_\_\_\_ Fla.,  
\_\_\_\_\_ 191\_\_\_\_

## EXTRACT FROM SEC. 9, CHAP. 5933, LAWS OF FLORIDA, 1909:

"Provided, That no more than seventy-five (\$75.00) dollars shall be paid  
for any horse or mule, \_\_\_\_\_ which shall be condemned and killed in the  
manner hereinbefore provided; and, Provided Further, That no animal or  
live stock shall be paid for by said State Board of Health, unless the owner  
thereof shall first make it appear to the satisfaction of the State Health  
Officer:"(1) That said animal or live stock shall have been owned and kept in  
the State of Florida one year previous to its condemnation;"(2) That said animal or live stock contracted the disease for which it had  
been condemned while in the State of Florida; and"(3) That no person shall be paid for more than ten (10) animals in any  
one year."

## BILL OF OWNER

STATE BOARD OF HEALTH OF FLORIDA

To \_\_\_\_\_, Dr,

(Owner)

DATE	To amount claimed in reimbursement for the loss of _____ animal described in Ap- praisement Form herewith, destroyed by order of the State Health Officer on account of Glanders:	Total Maximum Allowance:
_____	Horse, at \$ _____ each,	_____
_____	Horse, at \$ _____ each,	_____
_____	Mule, at \$ _____ each,	_____
_____	Mule, at \$ _____ each,	_____
_____	Totals Animal Total claim: \$	_____

The following tables show the distribution, the number of mal-  
lein tests, the number of condemnations, and sources of infection  
for the year 1911, and also give very valuable information upon  
the general history of glanders outbreaks for the years 1903 to  
1911, as compiled in the executive office from records on hand:

## GLANDERS IN FLORIDA, 1911

County	Town	Date	No. of Animals	Tested		Not Tested		No. with Glanders	Source
				Pos.	Neg.	Pos.	Neg.		
Alachua	Newberry	Jan. 16-Feb. 28	158	35	106	3	14	38	Oklahoma
Hillsboro	Tampa	April 18	1	1	---	---	---	1	Recurrence
Hillsboro	Tampa	Apr. 25-28	60	---	60	---	---	---	---
Polk	Haines City	Apr. 21	8	5	3	---	---	5	Kissimmee
Hillsboro	Tampa	May 12	1	1	---	---	---	1	Recurrence
Hillsboro	Tampa	June 4	1	1	---	---	---	1	Recurrence
Hillsboro	Tampa	June 15	1	1	---	---	---	1	Recurrence
Osceola	Kissimmee	July 8	30	---	---	1	---	1	Missouri or Montana
Holmes	Bonifay	July 29	21	1	15	3	2	4	Not traceable
Washington	Caryville	Aug. 8	7	---	6	1	---	1	Not traceable
Holmes	Bonifay	Sept. 26	3	---	1	2	---	2	Not traceable
Hillsboro	Tampa	Oct. 4	8	---	7	1	---	1	Recurrence
Washington	near Bonifay	Nov. 24	1	---	1	1	---	1	Recurrence
Totals			300	45	199	12	16	57	-----

## GLANDERS IN FLORIDA \*1903-1911.

TABLE NO. 1.

## SOURCES AND RECURRING OUTBREAKS.

Original Outbreak					Recurring Outbreak				
Year	County	Town	No. of Cases	Totals	Source	Year	Town	No. of Cases	
1903	DeSoto	Zolfo	9	43	Herd from Nebraska, sold at Orlando, 1903	1907	Sanford	3	
1903	Lake	Lady Lake	5				Longwood**	11	
1903	Lake	Leesburg	7						
1903	Lake	Conant	5						
1904	Orange	Sanford	1						
1904	Orange	Winter Park	5	43	Herd from S. Dakota sold at Ocala, Coleman, Tampa, 1905	1909	Ocala	62	
1904	Osceola	Narcoossee	1				1910	Citronelle	6
1904	Osceola	Peg Horn	1				1910	Ocala	5
1904	Osceola	Lake Gentry	7						
1906	DeSoto	Arcadia	2						
1905	Marion	Ocala	30	45	Atlanta				
1905	Sumter	Coleman	5						
1905	Hillsboro	Tampa	8						
1905	Hillsboro	St. Petersburg	2						
1907	Columbia	Lake City	19						
1907	Bradford	Providence	1	102	Gypsy Traders				
1909	Duval	Jacksonville	81						
1909	Duval	Marietta	1						
1906	Orange	Altamonte Springs	2						
1907	Duval	Jacksonville	1						
1903	Hillsboro	Tampa	2	22	Not Traceable	1908	Tampa	1	
1904	Jefferson	Monticello	1				1909	Tampa	2
1904	Hillsboro	Tampa	1				1911	Tampa	5
1907	Lee	Fort Myers	2				1911	Kissimmee	1
1908	DeSoto	Punta Gorda	1				1911	Haines City	5
1910	Hillsboro	Tampa	14	38	Oklahoma				
1911	Alachua	Newberry	38						
1911	Holmes	Bonifay	6						
1911	Washington	Caryville	2	8	Not Traceable				
Total Original Outbreaks (Cases) . . . . .					261	Recurring outbreaks, (cases) . . . . .			101
						Original Outbreaks (cases) . . . . .			261
						Total Cases . . . . .			362

\*From withdrawal of U. S. Army in 1898 to 1903 there is no record of glanders occurring in Florida.

\*\*Near Sanford

## DISTRIBUTION OF GLANDERS IN FLORIDA, 1903-1911, BY YEARS, COUNTIES AND TOWNS.

County and Town	Number of Cases										Totals	
	1903	1904	1905	1906	1907	1908	1909	1910	1911	In each Town	In each County	County
Alachua, Newberry										38	38	38 Alachua
Bradford, Providence					1					1	1	1 Bradford
Citrus, Citronelle							6			6	6	6 Citrus
Columbia, Lake City					19					19	19	19 Columbia
DeSoto, Arcadia				2						2	2	2 DeSoto
DeSoto, Punta Gorda						1				1	1	1 DeSoto
DeSoto, Zolfo	9									9	9	9 DeSoto
Duval, Jacksonville						1	81			82	82	82 Duval
Duval, Marietta							1			1	1	1 Duval
Hillsboro, St. Petersburg			2							2	2	2 Hillsboro
Hillsboro, Tampa	2	1	8			1	2	14	5	33	35	35 Hillsboro
Holmes, Bonifay								6		6	6	6 Holmes
Jefferson, Monticello		1								1	1	1 Jefferson
Lake, Conant	5									5	5	5 Lake
Lake, Lady Lake	5									5	5	5 Lake
Lake, Leesburg	7									7	7	7 Lake
Lee, Ft. Myers						2				2	2	2 Lee
Marion, Ocala			30				62	5		97	97	97 Marion
Orange, Altamonte Springs				2						2	2	2 Orange
Orange, Longwood					11					11	11	11 Orange
Orange, Sanford		1			3					4	4	4 Orange
Orange, Winter Park		5								5	5	5 Orange
Osceola, Kissimmee						1			1	2	2	2 Osceola
Osceola, Lake Gentry		7								7	7	7 Osceola
Osceola, Narcoossee		1								1	1	1 Osceola
Osceola, Peg Horn		1								1	1	1 Osceola
Polk, Haines City							5			5	5	5 Polk
Sumter, Coleman			5							5	5	5 Sumter
Washington, Caryville								2		2	2	2 Washington
Totals by years	28	17	45	4	36	4	146	25	57	362	362	



## CEREBRO-SPINAL MENINGITIS

This disease is also known as Blind Staggers, and causes the death of many horses. It is in no way related to the disease of the same name in human beings. Horses of all ages succumb to it. Often the attacks are mild and the horses recover. Unfortunately, however, deaths are frequent, and all that a man has may die in a very short time.

It has long been supposed that mouldy feed causes the disease, but many experiments have been made in which the identical mouldy feed which was said to have caused the trouble was fed to experimental horses, without untoward result.

The latest researches upon the question of the etiology of the disease seem to show that it is water-borne and, furthermore, that there are constantly found in the nuclei of the ganglion cells of that part of the brain known as Ammon's horn, of all horses dead from cerebro-spinal meningitis, a peculiar body resembling the Negri bodies found in the brain of rabid dogs. The disease has been reproduced in horses by spraying the nostrils with emulsionized brain from horses dead with the disease.

## LEECHES IN HORSES

A progressive localized disease of the skin and adjacent tissues occurring most often in horses that graze on low-lying pastures containing lakes or streams, characterized by the formation of a tumor which discharges a bloody plasma and which often contains root-like deposits within the tumor mass, composed of the mycelia of a fungus, calcareous deposits and pus cells, which frequently ends in the death of the horse. The disease is identified with the disease *bursatti* or rain sore, found in India. It occurs only in horses and is often confounded with the disease known as "summer sore," which is caused by a parasitic worm, *filaria iritans*.

The name "leech" has probably been given from the fact that the water leech is often found in the tumor, being attracted there by the bloody discharge. The "leech" is first noticed as a small flattish tumor, which projects a little above the level of the skin, the size of a quarter of a dollar. It grows rapidly, ruptures and penetrates through the entire skin layer into and through all adjacent tissues, including muscle, tendon and bone, causing perforations and the deposits before mentioned, which are known as krunkers.

When treated early, "leech" can be cured by the application of a strong disinfectant, such as forty per cent. solution of formalin, thoroughly applied. When the disease has penetrated the deeper tissues, disinfectants cannot be made to reach the parts to which the fungus has ramified, and the only course of procedure is to dissect out the affected tissue by wide and deep incisions. The disease is auto-inoculable, i. e., a horse suffering from the intense itching will develop the tumors on the lips and mouth parts from biting the original tumor.

## TEXAS FEVER

The cattle disease which does most damage to the cattle industry of, not only Florida, but the entire so-called South, is Texas or tick fever. The vast importance of this disease is seen when we note that every Southern State, as well as the National Government, is spending large sums of money to rid the country of the common cattle tick, the carrier of the disease. The spread of the cattle tick is limited only by cold and transportation facilities. Wherever a southern, tick-infected bovine animal goes it carries this peculiar disease, even though it itself seems perfectly healthy.

If the female tick drops off the smitten animal in warm weather in any climate, north, south, east or west, she lays her eggs. These hatch out and the young or seed ticks climb upon the first bovine animal that passes. If the animal be one that has never been infested with ticks before, be it southern or northern animal, it will, in about a week, develop a fever which in many cases ends fatally. A certain amount of immunity is conferred in those animals that become infested and do not die. We also know that young calves are not so susceptible to a fatal infection as the older animals. Hence, the new-born calves do not, as a general thing, die from the original tick-infestation, as would an adult, but acquire an increasing immunity from their successive infestations. It has been said that the cattle tick does a damage of \$40,000,000 per annum to the South. The ways in which this is brought about are as follows: They prevent the South from becoming a great cattle country; this prevents immigration of a desirable class of citizens and this lessens the agricultural output. They lessen the importation of valuable strains of cattle for the dairy and beef industries. They prevent southern cattle from entering the great markets upon an equal footing with other cattle, because of the national quarantine

regulations. They cause the production of inferior, stunted animals because of the damage they do in destroying that vital fluid—the blood. They cause the actual loss of cattle brought here, in ignorance by newcomers, and such persons learn by bitter experience that it is a losing proposition to bring full-grown cattle into a southern state where ticks exist. While full-grown animals are frequently brought here during the cool months when the ticks are more or less dormant, there is always an element of danger. I have known of many full-grown animals being brought here and successfully run the tick gauntlet. I have also known of many that did not get through, and died of tick fever. So that we may say the only safe thing to do is to bring bovines into the state as sucklings. They then have the same chance of living through the fever as a native-born. Of course, the foregoing refers to animals which originate north of the so-called Texas fever line. Bovines may be safely brought here from any point south of the quarantine line, provided that these animals have been raised on ticky pastures. In buying such animals, the question of their having been tick-infested can be settled by the purchaser by finding the scars of tick bites on the escutcheon, bag and down the back surfaces of the thighs, where the skin is hairless.

It seems a gigantic task to eradicate an insect so numerous as the cow tick. Yet it can be done. It cannot be done, however, without the co-operation of the farmers, many of whom must first be convinced that the cow tick does any particular harm. The tick is being eradicated and the quarantine line is being pushed farther and farther south every year. The Federal Bureau of Animal Industry issues every now and then a map showing the new location of the line and frequent proclamations by the Secretary of Agriculture announce that certain counties of certain southern states are no longer under quarantine. The minute this is done that county can enter the cattle markets on an equal footing with any other county in the United States.

The Florida State Board of Health has ample powers under the law to eradicate cattle ticks, and when the benefits of tick-eradication in other southern states becomes apparent to Floridians, and when Florida has increased her cattle both in number and quality, her citizens will demand the same chances of getting good prices for their cattle as others. Here is an example. Recently a trader of fine cattle sold into South Carolina sixty head of pure-bred and

high-grade Herefords. Had his customer lived in the northwestern part of South Carolina, the sale could not have been consummated, because in that section of South Carolina the tick has been eradicated and no cattle from a ticky country are allowed to be shipped there. Moreover, it was necessary, in order to comply with the South Carolina law, to test every one of this bunch of cattle with tuberculin, to exclude the possibility of their having tuberculosis. Suppose Cuba cleans up her ticks, and suppose every other southern state except Florida will eventually clean up, where will Florida find a market for cattle "on the hoof" under fair conditions?

#### BOVINE UNCINARIASIS

(*Salt Sick. Hookworm Disease.*)

In September, 1906, the writer prepared Bulletin No. 86, Florida Agricultural Experiment Station, with the above title. He defined "Salt Sick" as "An acute or chronic parasitic disease manifested at first by low fever, diarrhea, loss of appetite; soon becoming chronic, with continuance of low fever, constipation, loss of appetite, progressive emaciation, and pronounced anemia which, in many cases, terminates fatally." In the small intestine near the stomach in bovines suffering with the above symptoms, known locally as "Salt Sick" or "The Sick," may be discovered many small worms about the size of a pin, attached to the lining of the bowel. They are brought out more plainly by floating the bowel in water after splitting it open. In the manure of such animals may be found the ova, and when the manure is kept for twenty-four hours and then examined with a low-power microscope, it will be seen these ova have hatched, and the larval body of the hookworm appears. While these worms seem to be identical with the hookworm found in man, there are specific differences; hence they are known under the same generic name, but a different specific name, as *Uncinaria radiata*, the hookworm of cattle.

This disease is most prevalent when pastures die out in the winter time. It is also believed this disease is accentuated by starvation and by tick infestation. It is most prevalent on sandy pastures, around the margins of lakes and sluggish streams. It appears more in cattle pastured continuously on one pasture, because the pasture has the opportunity of becoming more completely infested than when it is frequently changed.



There are several important questions concerning the disease yet to be answered. Among them are:

Will the treatment prescribed for hookworm disease in the human, i. e., thymol, followed by a purgative dose of salts, free the animal of the worms? A few verbal reports of the success of the treatment as outlined in the above bulletin, using thymol, indicate that the treatment was successful.

Is the so-called cow-itch which people get from the cow-pen an infestation with the larval stage of the cow, or human hookworm? If cow-itch in people is due to infestation with the larval stage of the cow hookworm, does the cow-itch mean any more than a mere local skin disease, and does the invading larva ultimately perish in the human tissues?

May not cow-itch be another name for ground-itch, in which the invasive larva is really of the human species, and not the bovine species at all?

These are difficult questions to answer, but time and effort may throw some light upon them and answers may, in time, be forthcoming.

#### DISEASES OF DOGS

There are many valuable dogs in Florida, and a report of this kind would be incomplete if it failed to record the existence of two very important diseases in dogs.

#### RABIES

Rabies, which seems to be on the increase everywhere, is the most important canine disease, because of its communicability to man. It is the only disease, in the writer's estimation, that the state is entirely responsible for, because it is the one that can be legislated out of existence. A law imposing a high license upon dogs would soon rid the country of the many superfluous, ownerless curs which are the ones largely responsible for the spread of this horrible disease. A law-abiding citizen may reasonably claim the right of going back and forth on the streets of a city, or public roads in the country, without being in danger of assassination by a highwayman, or, what is just about as bad, being bitten by a mad dog. A dog should only be allowed to live because it is a useful animal to its owner. How many persons would house and feed a perfectly useless horse indefinitely? And yet all horses have more than earned all they ever got from their owners. Even if rabies

were a disease of animals only, there are enough animals that succumb to rabies every year to warrant drastic legislation against the ownerless dog. The fact that the State Board of Health furnishes a perfect preventive treatment against the development of rabies in the human should in no way moderate the stand which should be taken against the conditions which allow this disease to exist.

#### BLACK TONGUE

Black tongue in dogs is generally a fatal disease and one about which little seems to be known. The writer has found it uniformly fatal in his own experience. Pathologically, it is a gangrenous stomatitis, and it may be identical in its etiology with the disease of calves and pigs described by Mohler and Morse in Bulletin No. 67 of the Bureau of Animal Industry, under the title "Necrobic Stomatitis"; with the "Foot-rot of Sheep" by Mohler and Washburn, of the same Bureau; and of "Lip-and-Leg Ulceration of Sheep" by Mohler. The above investigators have found these three diseases to have a common causative agent, the *Bacillus necrophorus*.

Respectfully submitted,

CHAS. F. DAWSON,  
Veterinarian.

# REPORT OF J. W. DEMILLY, ASS'T VETERINARIAN

TALLAHASSEE, FLA., January 1, 1912.

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

DEAR DOCTOR: I respectfully submit herewith a report of my work as veterinarian for the period ending December 31st, 1911. My appointment was received October 17th, 1911.

## DETAILS AND WORK ACCOMPLISHED IN THE ADMINISTRATION OF HOG CHOLERA SERUM

Date	County	Town	No. of hogs Immunized	C. c. of Serum used
Oct. 18	Taylor	Salem	171	1,250
Oct. 21	Lafayette	Old Town	229	1,650
Nov. 2	Jefferson	Lloyd	130	1,650
Nov. 3	Madison	Lee	33	250
Nov. 6	Suwannee	Wellborn	33	300
Nov. 9	Lafayette	Old Town	148	1,200
Nov. 11	Lafayette	Eugene	24	320
Nov. 12	Alachua	Trenton	24	320
Nov. 13	Jackson	Cottondale	45	420
Nov. 21	Lafayette	Mayo	382	5,880
Dec. 6	Suwannee	Dowling Park	22	350
Dec. 7	Taylor	Perry	12	320
Dec. 8	Taylor	Hampton Springs	21	600
Dec. 9	Taylor	Perry	242	4,650
Dec. 13	Alachua	Trenton	54	1,125
Dec. 15	Lafayette	Mayo	77	1,100
Dec. 19	Leon	Tallahassee	125	3,800
Dec. 20	Calhoun	Port St. Joe	21	695
Dec. 27	Lafayette	Mayo	93	2,015
		Totals	1,886	27,895

It will be seen by the above report that the epidemic of hog cholera is by no means confined to any special locality, but is rather a general epizootic. It is impossible to get at the mortality of the disease, but I am safe in saying that in the hog-raising sections of Lafayette and Taylor counties the death rate has been enormous, running up in the hundreds. These heavy losses were in range cattle, where, under existing conditions, it was impossible to administer the serum. If in these sections the owners of hogs will work together and in co-operation with the veterinarian in charge, there is no reason why, in time, the disease could not be eradicated.

Respectfully submitted,

J. W. DEMILLY, Assistant Veterinarian.

# REPORTS FROM COUNTY AGENTS

ALACHUA COUNTY

J. Harrison Hodges, M. D., Agent

*Hookworm Disease.*—Undoubtedly many hundreds of cases of this disease have been treated in the county during the past year. Many schools have been inspected voluntarily by the physicians, and advice or treatment given in suspected or known cases of the disease. I should say that the campaign for the eradication of this disease is making satisfactory headway in this county.

*Tuberculosis.*—In recent years we see very few cases of the disease. Sufferers from tuberculosis find it exceedingly difficult to find accommodations here. The hotels and boarding houses naturally object to having tubercular patients among their guests, and the one sanitarium we have excludes them. These sufferers, therefore, seek elsewhere for the climatic advantages which they desire. Most people are now alert to the dangers of the spread of the disease by careless sufferers and do not encourage them to linger in the community.

*Smallpox.*—We have had a few cases of smallpox in the county during the year. For the most part the people are alive to the need of universal vaccination and the disease has not assumed any alarming proportions. The negroes are most often attacked, but some cases have occurred in white families. Members of the Alachua County Medical Society vaccinate all public school children free when parents are willing to accept this service. In this manner a large proportion of the public school children have been protected.

*Typhoid Fever.*—The filthy little fly is now recognized generally by our people as an active and deadly foe because of the easy and rapid manner in which it may spread the germs of this disease. Screening against this pest and other methods for the control of the same are becoming more general. Gainesville requires by ordinance the screening of meats and other foods when exposed for sale. Several arrests and convictions have already been had under this ordinance. The agent of the State Board of Health was among the first in the county to administer the anti-typhoid vaccine to himself and has administered it to a number of others, especially nurses and those more or less exposed to the disease.



*Sewage Disposal.*—Gainesville is the only city in the county so far having a complete system of sewage disposal. The system in this city gives perfect satisfaction and undoubtedly makes for better health.

*Pellagra.*—Only three or four deaths have occurred from this disease during the year.

*Diphtheria, Measles, Scarlet Fever, etc.*—These disease have only prevailed to the extent of a few sporadic cases.

Florida Health Notes, the official bulletin of the State Board of Health, is read by a considerable number of people and is a valuable educational factor in sanitary and public health matters.

#### BAKER COUNTY\*

*Dr. J. Frank Curtis, M. D., Agent*

Health in Baker County during the year 1911 has been fairly good. There were only a few cases of typhoid fever. Fevers seem to approach most closely to the malarial types, while some cases were of a bilious nature, being remittent and from five to fifteen days in duration.

Have seen or heard of no chickenpox and but one case of smallpox during the year, although there were some cases of smallpox across the state line at Moniac, Georgia.

There were three dogs killed at different times, which were thought to have rabies; one at Griffing Brothers' Nursery, upon analysis by the State Board of Health, showed positive rabies. These dogs bit many other dogs and, so far as learned, one white child and one colored one was bitten. Pasteur treatment was ordered for both and complete treatment was administered to the white child and treatment commenced on the colored one, but after the first two doses were administered, the patient failed to appear for the remainder of the treatment. Upon inquiry it appeared that a visiting doctor, as the patient and others said, had told patient that he "had no hydrophobia; that he would turn green around the eyes" if he had, and in a way discouraged his taking further treatment. Fortunately, the above type of M. D. does not rank with the high-class ethical gentlemen who compose the majority of professional brethren, and his foolish talk does but little harm excepting with ignorant people.

\*Dr. Curtis died Jan. 26th, 1912.

The town of Macclenny has passed an ordinance requiring all dogs found on streets to be muzzled or killed for the next thirty days, or until all danger from the affected dogs is past.

#### BRADFORD COUNTY

*Albert H. Freeman, M. D., Agent*

In submitting my report for 1911 I am fully aware of my inability, for many reasons, to make it satisfactory either to you or to myself. In the first place we have had smallpox to deal with to a greater or less extent in March, and the work with that has taken the time that might otherwise have been given to other problems.

No vital or morbidity statistics are available, but the death rate is low.

The public generally is getting an idea of hookworms and many children are now brought to our physicians to see if they are not victims of the parasites. It is a desirable condition when people are fully aroused as to the importance of the knowledge of the danger of this pest, and this much has been accomplished in overcoming the situation.

Tuberculosis is just now decreasing among the whites but increasing among the colored people, in whom immunity is less, progress swifter and mortality greater than with the whites. This increase among the negroes is a menace to the whites because, as servants in various capacities, they are intimately associated with us. They prepare the food we eat, wash and iron the clothes we wear, the handkerchiefs with which we wipe our mouth and nose. They expectorate on our sidewalks, in our stores, around our kitchens, and the "typhoid fly" becomes the tuberculous fly—we the hapless victims. What the flies leave the winds toss about and thus scatter the seed of the "great white plague."

No statistics are available as to the number of cases of smallpox actually occurring in the county last year. It was reported and found at Providence, Lake Butler, Raiford, Elarbee, Lawtey, Saxton, Hampton, Starke and outlying districts. More than 1000 people were vaccinated. This epidemic lasted from March to November, appearing and disappearing from different communities as many as four times, being driven out by vaccination and re-introduced from a new source. There were no deaths. The majority of those attacked were colored people, who were the hardest to control, often

refusing vaccination and refusing to keep away from those sick of the disease. Compulsory vaccination is needed for this class of people, who are a menace to themselves and their neighbors. In the control of this epidemic I was ably assisted by Dr. T. D. Gunter, the efficient health officer of the town of Starke, who vaccinated free of charge, excepting his meagre salary from the town, not only such citizens of Starke as presented themselves, but all others who came for that purpose. Many other physicians also gave their aid. There were probably one hundred cases.

Malaria has been more than prevalent during the year. It was also noted that there were more mosquitoes than during any previous year. No work of any extent has been done to prevent the breeding of mosquitoes.

Typhoid fever seemed to be less prevalent during the year. I know of only five vaccinations against the disease. These were done by your County Agent.

Numerous private individuals have built septic tanks to take care of the sewage from their residences. Some of these are correctly built, while others are merely cesspools. The county has put in a large septic tank at the court house and jail, all well built, excepting that no provisions are made for the nitrification of the sewage. Many deep wells have been put down during 1911 by turpentine operators and private individuals. The town of Hampton has long depended upon shallow wells for her water supply. Recently an enterprising citizen, Mr. C. J. Weeks, has installed some deep wells, pump and tank, laid piping, and is now supplying those citizens who wish it, with artesian water.

Only one case of diphtheria has come to my notice during the year, and one of scarlet fever. Measles was epidemic in some portions of the county the earlier part of the year, with several deaths, directly and from the sequelæ. Some mild whooping cough has prevailed, with no deaths.

Several cases of pellagra have been observed, with one known death and two that will probably die.\* These cases were of the chronic type. Most of them have seemingly improved under treatment with arsenic, calcium sulphide and symptomatic treatment. Four cases were colored and two were white.

\*These two cases died during January, 1912.

Two cases of infantile paralysis have occurred, one a twelve-year-old miss. Type of disease was rather severe. Both cases have practically recovered under treatment.

I believe the greatest agency for publicity in the campaign for health is the country newspaper. With the awakening of the people to a realization of the need of sanitation and the prevention of diseases, its value in dollars and cents, as well as relief from suffering and premature decay, will cause increasing desire for knowledge of ways and means of getting what we want, and the medium for supplying this need will be naturally the newspaper that reaches the people—the country weekly. The community's greatest asset is health. To keep well we must not violate the laws of health. To avoid violation of these laws we must know them. They are taught now to our children in the public schools, but thousands of us have no access to this knowledge. The newspaper has the machinery for supplying this knowledge to the people. This is a work of conservation of our resources, enriching our state, adding to our defenses by increasing the brain and brawn of the sons and daughters of Florida, converting probable liabilities into positive assets.

The *Health Notes* is doing a valuable work, but is not reaching all the people, probably cannot just yet. If editors of Florida papers would carefully read this publication they would find something each month that would help their readers and hasten the health campaign. I am glad to report that our leading county paper, the Bradford County Telegraph, often aids in this work, and is in hearty accord with every movement made for the betterment of the public health.

I believe the establishment of a press bureau as an extension of the work of the *Health Notes* would be a good thing, supplying each week to such papers as would aid by its publication such matter as would be considered timely. Thus you could reach a larger number of people through a medium they already read, and the contents of which they believe. You could continually keep before us some educational health topics, and gradually the sentiments expressed would permeate the mind of the masses. This you are doing now with the means at hand, but might it not be more rapidly done and more effectively with this plan I have suggested?



BREVARD AND ST. LUCIE COUNTIES  
*W. E. VanLandingham, M. D., Agent*  
 (No Report.)

CITRUS COUNTY  
*J. H. Chiles, M. D., Agent*

Number of births -----	60
Number of deaths -----	29
Number of cases of smallpox -----	40
Number of cases of measles -----	20
Number of cases of typhoid fever -----	15
Number of cases of pneumonia -----	7
Number of cases of pellagra -----	1

No cases of diphtheria nor of scarlet fever were reported.

Malaria has been very prevalent throughout the county, owing to natural causes favoring the development of the disease: a minimum amount of rainfall, unusually low water, a late autumn with extremely warm weather, favoring the growth and proliferation of the mosquito.

The hookworm waxes strong in Citrus, and is a factor to be reckoned with in the eradication of disease both among adults and children. It is hard to impress on the minds of parents the extreme importance of having their children treated for this condition.

Sanitary conditions here, like in many places, are subject to criticism and improvement.

The importance of having doors and windows of homes screened, thereby keeping flies and mosquitoes excluded, is not yet fully appreciated, but, through the medium of the Health Notes the public is being educated.

CLAY COUNTY  
*L. C. Fisher, M. D., Agent*

1911 has been an exceptionally healthy year for Clay County. Doctors who have been here for years say they have never seen so little sickness here as there was this last year.

There have been two or three cases of typhoid fever; six or seven cases of malarial fever; and these appeared only where the houses were not screened and bars were not used.

We had during the year five cases of smallpox. The disease was checked by vaccination.

Three cases of pneumonia occurred. No diphtheria and no scarlet fever.

DADE COUNTY  
*J. M. Jackson, M. D., Agent*

Another year has passed, and it becomes my duty as agent of the State Board of Health for Dade County to report conditions.

I am sorry to say that the province of the agent of the Board in this county has not been so smooth during the past twelve months as it was in the fourteen years before.

The year was ushered in with a few cases of smallpox at the Isolation Hospital, having entered during the fall of 1910 while I was on my vacation. One case in particular was that of a mother's boy whom she felt had not had sufficient care while at the hospital, although he made a perfect recovery with no ill after-effects. She began making charges against the management of the institution. This went on from time to time, and finally wound up with a presentment by the Grand Jury for Dade County, after what appeared to be a superficial examination, making serious charges against those in charge. This led your agent to ask for an investigation and for further details in the matter I would refer you to files on record in the executive office.\* During this time we had nine direct importations of smallpox into Dade County, with a spread in but one instance, the whole matter ending, so far as the winter cases were concerned, early in May.

Full repair has been made to the sewerage system of the Isolation Hospital, and it has continued to work in a first-class manner; however, there is a small amount of work on the inside fittings which needs to be done as soon as a plumber can be secured who is not afraid to do the work. The house, with all bedding and furnishings, has been thoroughly cleaned and scrubbed, and in this condition closed, and remained closed (outside of the caretaker's presence and the visits of your agent) until again in November, when a case of smallpox was brought to Miami on the work train of the Florida East Coast Railway, which was promptly recognized and isolated at the hospital. The cars were thoroughly fumigated and all the crew re-vaccinated and, the period of incubation having passed, we feel certain there is no further danger from this source.

It seems almost impossible to employ a thoroughly competent man to care for the Isolation Hospital as it should be. The compensation during the period in which there are no cases has been

\* See Appendix.

fifteen dollars per month, and when there are cases two dollars per day has been paid in addition to the regular compensation, with food added.

The Hospital at the present time needs some new furniture in the way of mattresses, as those which were bought by your agent at the time of furnishing it, being what is known as "sponge" mattresses, and which at that time were generally considered to be the best mattresses made, have with time become hardened and, while they are smooth, they are very hard and rather uncomfortable for a bed to a man covered with smallpox. The continued use of the stove by the caretaker in preparing his own meals in the past six years has caused same to be very much worn and, not being over careful with the pipe, has allowed the kitchen to become very much smoked and presents a rather untidy appearance, but this is now being overcome by having it whitewashed. There are some repairs to the roof, steps and other minor things around the building which your agent believes it would be wise now to make; also the building should receive a good coat of paint, as it would preserve the wood and appearance of the hospital.

If the Board deems it wise, it appears to your agent that it would be better if an arrangement could be made with a competent man who would have a stipulated salary the year round and no extra compensation when patients are in the hospital. The only additional compensation he would receive is food, free of charge.

Outside of smallpox there has been little to disturb the calmness and quiet of the State Board of Health in Dade County, and it was regretted very much that such an occasion should have arisen after fourteen years of absolute quiet in this county.

There has not been much work done in hookworm disease in this county, as there are not a great many cases; yet there are numbers moving to this county who are infected with the disease, and it is to be regretted that in several instances parents have refused to allow their children to receive hookworm treatment which had been tendered them by your agent and the medical profession in the county.

Tuberculosis has not made as much headway if we are to judge from the death rate in Dade County this year, as in the past.

Pellagra has been more in evidence than in any year past, there being reported some twelve cases and two deaths during the year.

Anterior poliomyelitis, which has caused so much disturbance in some sections of the country, is practically unknown with us.

Malaria has been more in evidence this year than in any year within the past fourteen, but I believe the people are becoming more aroused and realize more perfectly the effect of the preventing of the breeding of mosquitoes, and in a few years we will find very much less of the disease.

Typhoid fever has been very much less this year than in any year within the past ten, for people are recognizing the chief source of infection for its spread is flies and are realizing more perfectly the danger from one fly than once they did from droves.

There has been an occasional case of diphtheria in different localities during the past year, and in almost every case there was no possible chance of finding the source of infection; but the prompt use of antitoxin in sufficiently large quantities and also the immunization of those coming in contact with the patient, has kept down any spread, as well as kept the death rate to only one case, that of a child about four years of age.

Your agent has advocated among the medical profession and the laity the early use of antitoxin in all suspicious throat troubles, in sufficiently large doses to have effect, also the sending of a specimen to the laboratory and, if diagnosis is confirmed, to then immunize the entire family.

There have also been a few cases of scarlet fever, but these cases being handled by the attending physicians according to the rules of the State Board of Health, there has been no spread in a single instance among the immediate families or those coming in contact; therefore, we feel safe in saying that for each case found there was no spread.

Some two years ago the City Council of Miami passed an ordinance for the inspection and examination of milk, which has borne good fruit. I feel now that all the dairies selling milk in Dade County are doing it along sanitary and scientific lines.

While Assistant State Health Officer Byrd was visiting Miami in November, 1910, he delivered several lectures, both here and over the county, which I think has resulted in much good. Your agent is not a public speaker and has attempted no lectures, but has given careful attention to complaints made and has endeavored to have any sanitary nuisances or other causes properly attended to. Having a large suburban population, over which there is no civic



control, the sanitary measures in these localities have not been kept up to the proper standard during the year and it seems almost impossible to get anyone to take hold of this work who will carry it on as it should be. There is no law allowing your agent to designate any one person to alone do this scavenger work and receive compensation for it, and a number attempting to do it have made it extremely annoying and almost impossible to get sanitary conditions in the suburbs of the city as they should be. This, I am glad to say, will be largely overcome, I trust in a few weeks, as the city boundaries are now expected to be enlarged so as to take in all suburbs that may arise for some time, and, under their sanitary regulations, the conditions will be much better.

Your agent is glad to note that the state press has been very insistent along certain sanitary lines, and I trust that, while these have not borne the fruit they should have, at the same time they will at no distant date be fruitful and a great deal of good accomplished for the general health of the community.

Just here I wish to add my mite of commendation to the State Board of Health for its publication, the Health Notes. I think this has been one of the most fruitful sources of increasing the layman's knowledge and of improving sanitary conditions and general health conditions over the state, and particularly in Dade County, than anything that has been done in years, and I am glad that we can feel proud that the publication of the bulletin is as good, if not better, than that published by any State Board of Health in the United States.

There are no health organizations outside of the Dade County Medical Society which, I am glad to say, is composed of the members of the medical profession of Dade County, and has a very full and good attendance, all of whom are at all times glad to do whatever they can for the benefit of the public health, whether it be in instructing their patients in proper sanitary measures or in advising what sanitary steps should be taken.

This has been a record-breaking year for Dade County, the population having increased very rapidly within the past twelve months; citizens coming from all over the United States and, I might say, almost the entire world. It is with some degree of pride that we point to the general healthful conditions that have existed among the citizens of the county during 1911, for with such an influx of population as we have had, it would be more

than natural to suppose there would have been a perceptibly large amount of sickness among this population and also that the average general conditions of health in Dade County during 1911 would not have been up to the usual standard of the past four years, which have been more than good.

#### DESOTO COUNTY

*R. L. Cline, M. D., Agent*

As local agent of the State Board of Health for DeSoto County, the following report is submitted by me concerning health conditions which have prevailed in the county during 1911.

Upon the whole, we have had but little sickness. Most of the physicians of the county are wide awake upon the subject of hookworm disease and, while it is very prevalent, much is being done. When I came to this county eight years ago, I could see many patients daily, showing pronounced symptoms of the disease. Such patients are rare to-day.

Tuberculosis is rarely seen here, there being probably a half-dozen cases only in the county. Patients who come here suffering from the disease, or with bronchitis, are much benefited.

We had about fifteen cases of smallpox which came under my care, most of them occurring about April and May. No deaths. With the exception of three cases, all were among the negroes. I succeeded in getting nearly all the other negroes vaccinated, in those localities where a case occurred.

Malarial fever has been our prevailing sickness. I have known of but few malignant cases during the eight years in the county. Much is being done in preventing mosquito breeding; the public is being rapidly educated along these lines.

We have had but a few cases of typhoid fever. Since the public has been taught how typhoid fever may be transmitted, they are usually cautious when a case is present.

In November diphtheria occurred in Arcadia. Every precaution was taken to prevent its spread. We had six cases with one death.

We have had no cases of whooping cough, scarlet fever or dengue.

During 1911 pellagra has been more prevalent, probably eight to ten cases, with two or three deaths.

I have not heard of a case of anterior poliomyelitis.

Dr. Byrd visited Arcadia in November and gave a lecture on public health and sanitation, which was highly appreciated. I wish he could do more such work.

The Florida Health Notes are received and read by several in Arcadia. I don't know whether other sections of the county get them or not. The Notes is a wonderful educator and I wish more people would read the bulletin.

I have thought for a long time I would get the local papers to publish some of the articles in the Notes, and they express a willingness to do so, and this will be done during the year.

#### ESCAMBIA COUNTY

*J. Harris Pierpont, M. D., Agent.\**

*Hookworm Disease.*—There has been no regular crusade directed against hookworm disease in this county, though the doctors are on the lookout for such cases and have evinced a greater interest in its treatment than heretofore. The chief difficulty in treating the disease lies in the fact that patients who have been given an initial dose of treatment often pass from observation of the physician rather than continue the treatment, which to them seems severe. This statement refers particularly to the poorer and less intelligent class of citizens.

*Tuberculosis.*—It is truly gratifying to report a marked decrease in the number of deaths from tuberculosis, as compared with the preceding year, there having been 62 in 1910 against 42 in 1911. As no records are kept of the number of cases, it is impossible to form any opinion as to the number now existing in the county.

*Smallpox.*—There were reported during the year 109 cases of smallpox, 44 white and 65 black. Naturally, as long as the people resist the employment of vaccination, just so long will the disease make its appearance and claim an additional victim for the Great Beyond.

*Malarial Fever.*—The county has suffered from malarial fever again this year, several hundred cases occurring in one locality in the city of Pensacola alone. It cannot be expected that conditions will improve until the city council provides a much more liberal

\*While Dr. Pierpont was not actually appointed the agent of the Board for Escambia county, until February 6, 1912, yet he had, during the several months' illness of the late Dr. Anderson, the agent of the Board until his death on February 1st, been conducting the affairs of the office, and has complied from Dr. Anderson's records this report.

budget for maintaining an active crusade in exterminating mosquitoes, and the local health authorities a more rigid enforcement of the sanitary ordinances.

*Typhoid Fever.*—There has been an increase of two in the number of deaths reported from typhoid fever as compared with last year's report, there having been 31 in 1910 and 33 in 1911. So far as is known, some of the physicians instruct the family, and attendants upon typhoid fever patients, how to institute and conduct prophylactic measures during the course of the disease; but there are others who take no precautions whatsoever. Only a very few citizens have availed themselves of the protection afforded by anti-typhoid vaccination, though this matter has been freely discussed in the local medical society, and occasionally referred to in the press. There remains much to be done in the way of educating the public along the lines of strictly preventable diseases such as those just enumerated.

*Sewage Disposal.*—The sewage system of Pensacola has been greatly extended during the past year, so that now the greater portion of the thickly inhabited sections enjoy modern sewage facilities. The city council has during the year attempted to pass a rigid milk inspection ordinance, but has not as yet completed this much needed legislation. The water supply of the city is, as heretofore, pumped from wells averaging about one hundred feet in depth. The water is very pleasing to the taste, limpid and "soft", and unusually free from organic contamination. The milk supply for the city is furnished by a number of individual dairies located outside of and contiguous to the city proper.

During 1911 there were 13 cases of diphtheria, with 1 death; 18 cases of scarlet fever, no deaths; 16 cases of pellagra, 8 deaths; 10 cases anterior poliomyelitis, no deaths; number of cases of measles unascertainable, with 4 deaths; number of cases of whooping cough unascertainable, with 8 deaths. There have been no cases either of hydrophobia or dengue.

It is not possible to state whether or not pellagra is on the increase, for until recently its diagnosis was overlooked often by the medical attendant.

My personal experience with anterior poliomyelitis, though quite limited, leads me to believe that it is not nearly so contagious as is generally believed. There has appeared only one case in the families having a number of children, none of the brothers or sisters



having contracted the disease, though no prophylactic precautions were observed in any of the cases.

There is no record of official inspections of localities in this county to be found in the office, hence no report can be made. I do not know of any medical lectures of a public nature given by local physicians or laymen, though the need of such methods of elucidating sanitary problems should appeal most strongly to every one.

The *Health Notes*, and it can well be paraphrased, *Help Notes*, is doing a wonderfully effective work wherever it is read, and if it could be read in every home in the state, sanitary problems would be solved without difficulty. Let the mailing list be lengthened almost to the breaking point!

Such vital statistics as are furnished will be found under the report of the City of Pensacola.

There is no system of medical inspection in the public schools, either in the city or county (though such a system is greatly to be desired), due doubtless to the absence of any health organization. Without such an organization it cannot be expected that the public health literature, even if received, will find a way of reaching the average citizen. The newspaper seems to be the best medium for diffusing health knowledge among the people, and it is well that the editors are willing to publish such numerous articles upon these subjects. The moving pictures are also a valuable and a highly practicable means of presenting short, crisp and pungent paragraphs upon sanitary duties, and city ordinances, as thousands of citizens frequent these performances daily and read everything thrown upon the screen.

## SMALLPOX IN ESCAMBIA COUNTY, 1911.

Town	White	Black	Total
Century	1	1	2
Cantonment	--	1	1
Goulding	--	1	1
Molino	1	4	5
McDavid	12	--	12
Muscogee	--	6	6
Olive	1	--	1
Pensacola	28	52	80
Quinette	1	--	1
Totals	44	65	109

No. of smallpox patients admitted at Escambia County Isolation Hospital 27

No. of days 27 patients were in hospital 307

Grocery bills for above \$54.31

Scarlet fever:

Pensacola 17 cases

Muscogee 1 case

18

Diphtheria:

Pensacola 12 cases

Century 1 case 1 death

13 cases 1 death

Fumigations:

Account Smallpox 84

Account Scarlet fever 18

Account Diphtheria 13

Account Typhoid fever 13

Account Tuberculosis 19

167

Permits issued for the Transportation of Dead bodies 93

## FRANKLIN COUNTY

B. B. Blount, M. D., Agent

In rendering my report on the health conditions of that portion of Franklin County under my supervision, I have the honor to state that the conditions prevailing during the year have been very good.

I have treated only one patient for hookworm disease during the year, but have not been able to get a subsequent report from the patient.

One death occurred from tuberculosis, and so far as I have been able to ascertain there is not another case of the disease in this vicinity.

No cases of smallpox have developed here during the year. We had one case late in 1910 which extended into 1911. This case was in a family, none of the members of which had ever been

vaccinated, but immediately upon the case developing, all other members of the family were vaccinated, and there was no further infection.

Malaria has been quite prevalent, and was of the bilious remittent type, but the prevalence was small compared with 1910. Absolutely nothing has been done to prevent the breeding of mosquitoes.

One case of typhoid fever occurred—in a patient recently removed here from a town in Georgia.

There have been no cases of diphtheria, scarlet fever, whooping cough, anterior poliomyelitis, dengue, hydrophobia or pellagra that have come to my knowledge.

There have been no official inspections of localities or schools in this vicinity (Carrabelle), nor have any health lectures been delivered.

So far as I have been able to ascertain, there is one family in Carrabelle that reads the Florida Health Notes and profits by its teachings. There are comparatively few here who read the papers (the dailies), and most of them are satisfied with the Blade and Ledger variety.

There are no health organizations here. The male population doesn't seem to take much interest in anything of a public nature, and the ladies have their time fully taken up in trying to raise the minister's salary.

#### GADSDEN COUNTY

*G. W. Lamar, M. D., Agent*

(No Report)

#### HAMILTON COUNTY

*R. D. Tompkins, M. D., Agent*

There has been no public health work done in Hamilton County this year, with the exception of that done by the Florida Health Notes. This publication has been of appreciable value. As for those who do not receive or do not read it, they have had to depend upon what their physicians teach them.

The diseases in the county for 1911 have not varied in general from previous years. There have been no epidemics of any severity except the usual malaria, hookworm disease, and a trifle more typhoid fever, I think.

#### HERNANDO COUNTY

*W. H. Cox, M. D., Agent*

During 1911 we have found eighty-three cases of hookworm disease and all have been treated. About ninety per cent. have yielded to treatment, which makes the average school child in Hernando County compare favorably with those of any county in which one travels.

Have had two cases of tuberculosis, both of which died soon after their arrival, having come here in the last stages of the disease.

Smallpox prevailed last summer among the colored race, and while I am not able to give the exact number of cases, will risk the assertion that we had two hundred cases within the county without a single death.

In my opinion vaccination has so much modified smallpox that unless complications arise we need not fear danger. One negro woman rumored that her husband was killed by vaccination, which aroused so much suspicion in her neighborhood that vaccination became too much of a bug-bear to be practical among those whom the rumor reached.

Malaria was prevalent in the fall. The exact number of cases cannot even be estimated as most of them were of so mild a type that the doctors were not called in, patients treating themselves with simple remedies. The conditions for the ultimate eradication of malaria in this county are being pushed with considerable zeal by the screening of homes and otherwise preventing the breeding of mosquitoes, and with the lessons taught by the State Board of Health, I am fully of the opinion that this disease will be unknown to the people of Florida ten years hence.

Four cases of typhoid fever have occurred, all sporadic. The conditions have not been sufficiently alarming to cause the necessity of vaccinating to prevent typhoid.

Have had only one case of diphtheria, and was not able to trace from whence came the bacillus.

Have had four cases of whooping cough, with good recoveries. Two cases of pellagra, one of which went back to the North last summer, and the other one is improving.

Being a small county and having been, until recently, very sparsely settled, Hernando County has been free from contagious diseases, but on account of the rapid increase of population, people



coming from all sections of the country, we are in more danger, and hence the lessons we are trying to teach to the laity regarding sanitation and the screening of houses, etc., will, if the newspapers of the state lend more of their space and time to the teachings set forth by the State Board of Health, make surgery obstetrics about the only work the Florida doctors will have to do.

Since February, 1911, people, daily, either from the other states or from foreign countries, during all seasons of the year, and from all climates, have come here. Some have remained for a few days or a few weeks, and have returned to their homes to dispose of what they had and come back. Many were in a position to remain permanently, thus more than doubling the population of the town and county within the year, but almost without exception the new arrivals, whether they remained or not, have been benefited in health and spirits. Probably five thousand human beings have visited or located in Hernando County within the twelvemonth and it is eloquent of the climate conditions that practically all of them who were indisposed, experienced relief from chronic ailments, such as pulmonary afflictions in early stages, asthma, rheumatism, hay fever, indigestion and all forms of broken health or general debility. Scores of people from all parts of the east, north and west and foreign countries spent the summer here and learned to their great surprise and delight that life here is robbed of the terrors of high temperatures such as caused sunstrokes daily in other parts of the country. Hernandoites know nothing of the terrors of stifling heat which prevents sleep by night and causes sunstrokes by day.

If, by accident, imprudence or easily prevented unsanitary habits, the native or the new comer is overtaken by disease, it attacks only in its mildest form and is easily controlled, and Hernando County has yet to experience its first epidemic save one—that of dengue in 1905—no deaths—where the fatalities are above that considered normal in other states and countries. Barring a few cases which were hopeless when they came to this section, Hernando County has a clean pathological record. Given a law such as is now in force in Pennsylvania and some other states, with the State Board of Health to see to its enforcement, all forms of disease would find scant lodgment in Hernando County.

Those interested who desire to know why this claim is made need only to be assured that it is because of the elevation of the rolling land, which, being only about ninety miles from Ocean to

Gulf, is constantly furnished an abundant quantity of salt sea breezes that come to us vitalized still further by enormous supplies of needle pine and hardwood forest brewed oxygen.

The conditions for constant good health are here. Mankind, reasonably cautious as to sanitary conditions and diet, should live here as long as he wants to.

#### HILLSBORO COUNTY

*Chas. Wm. Bartlett, M. D., Agent*

In looking over the work of the year 1911 for the annual report, I find that the three main diseases that gave us trouble in our county were smallpox, typhoid fever and whooping cough, although diphtheria and scarlet fever have prevailed more or less during the year.

*Smallpox.*—We had on hand at the beginning of the year twenty cases of smallpox left in the Isolation Hospital from the previous year. There were sixty-four new cases during the year 1911, of which thirty were taken into the hospital during the month of January, twenty during February, nine in March, one in April, three in August, and one in September, which, with the twenty left over, makes a total of eighty-four cases during the year. On the 7th of February we lost a baby with confluent smallpox at the hospital, named Abrams; this was the only death from smallpox in the hospital.

Some of our most prominent people in Tampa having contracted this disease, the whole population seemed to become more than usually alarmed, and the application for vaccine was greater than in any previous year. During January our office was often so crowded that not one more person could have gotten in. But unfortunately, the race that suffers most from smallpox—the negro—did not apply for vaccination. The Mayor of Tampa appointed two colored physicians for the purpose of vaccinating, but with what success I do not know. He also appointed two special policemen to make a house to house inspection, which undoubtedly was a great advantage, as a good many more people were vaccinated on account of having the matter brought so close to their attention.

On August 15th, at Boyett Station, smallpox broke out among the turpentine hands employed at that place. I made a trip over

there on August 16th and vaccinated every hand on the place, and since then I have heard of no more cases from there.

It is very gratifying to report that the dread of the smallpox hospital seems to be entirely eliminated from the minds of our citizens, and we find during the last two years or more that people who have smallpox, walk or drive to the hospital of their own free will without having to be sent there; a condition very different from what it was a few years ago, when I was threatened with having my head blown away if I should send a patient to the Isolation Hospital.

*Typhoid Fever.*—Typhoid fever, which has prevailed more or less all the time, began to increase in a marked manner during the months of May, June and July, so that it became quite alarming to some of the physicians practicing in the City of Tampa. The City Physician of Tampa took charge of the situation, in an effort to enforce the ordinances of the city as to the milk supply, restaurants, inspection, etc. I volunteered my services to him, as the representative of the State Board of Health, and we divided between us the dairies supplying milk to the city, the inspection of restaurants, bakeries, and other places where eatables uncooked were offered for sale, and also to trace if possible the source of infection. The Assistant State Health Officer also came to Tampa,\* and we went over a great deal of the ground together; and so far as I can see, it is impossible in a town like Tampa to trace the source of infection of typhoid fever with certainty, unless we blame the fly for the whole trouble: milk was thought of, there being two dairies with one case of typhoid at each; but even at those dairies the immediate cause of contamination might have been the fly. When I began my inspection, in all the dairies, flies had access to the utensils used for handling the milk; the screens that had been placed to comply with the ordinance were a farce; sometimes it was doubtful whether there were more flies inside the screen or outside in the open. In dairies outside the city limits there were open privies and open also to the access of flies. In the City of Tampa in areas supposed to be connected with sewers there were places with open closets scattered all over.

Another source of infection may be the meat wagons that bring meat into the city, coming from a section (Gary) that is thickly

\* See Appendix for Special Report on this incident.

populated but not incorporated in the city limits, where not a single closet is screened. The flies seem to take a special pleasure in joy riding in those meat wagons, and I suppose that they leave the wagons at different places throughout the town as the wagons proceed on their trips, with a general delivery of all the flies at some place where the meat is delivered.

When we take into consideration the great number of people that take their meals in restaurants and eat at lunch counters and other places where no protection at all is taken against the fly, it will be seen how impossible it is to trace a case of typhoid fever. In going my rounds with Dr. Byrd we stopped off in a restaurant to see the condition in regard to flies, and I believe we counted over ninety in a man's plate where he was eating, and I cannot say how many were on the table, on the bread, on the knife and fork and in the bottles that were on the table.

In order to make the screening of dairies effective, I suggested using a vestibule or double door, which had greatly diminished the number of flies on my second inspection; in some places they were gone entirely.

Undoubtedly the campaign that was undertaken did produce good results, as the people had the facts brought close to them; and in this connection, I don't know whether I have read it somewhere, or whether it has come into my mind: the idea that one of the very best ways to educate the people in matters of hygiene would be, if it could be brought about, to have a day set apart by the Legislature for Health Day, and better yet, if such a Health Day could be instituted by our National Congress—one day in each year to be set apart as we now have Thanksgiving, Labor Day and Arbor Day. What a vast amount of good would result if all the people would acquire a strong personal interest in such a day as they now have for the Fourth of July and Christmas. For example, we could substitute for the package of firecrackers and death-dealing toy pistol, a package of Rough-on-Rats, Death to Roaches or Sure-Killer of Flies, and in lieu of post cards we could have literature treating of health matters, which could be sold by dealers or given away by the municipality in the different localities through the country. If the people generally would devote one day in the year to the poisoning of rats, in a very few years there would be no danger of Bubonic plague; with the whole population killing flies for a day, in a short time we would have no typhoid fever, and



the same rule would hold good with respect to all disease-producing insects. Of course, it is probable that it would always be impossible to bring about a general observation of such a Health Day, but a great many things that seem impossible have been accomplished when an effort was made.

As a result of our campaign the condition of dairies and restaurants was improved and there was at once a marked dropping off in the number of cases of typhoid reported; but while the dangerous conditions continue to exist, with the slightest neglect typhoid will again appear.

*Whooping Cough.*—Whooping cough probably killed more than typhoid did, but did not make quite as much noise. It was one of the most severe epidemics of this trouble I have ever seen, because in nearly every case death was due to complication with bronchial pneumonia. The disease started in the early spring and continued through nearly the whole summer; and this trouble is extremely difficult to control by health officers, as nearly all physicians advise their patients to get out in the open air, and they carry their whooping cough to various places of amusement, such as moving picture shows, so that they spread the trouble all over town.

*Diphtheria.*—Diphtheria has prevailed throughout the whole year, but more cases have come under my notice through the months of November and December. The State Board of Health takes care of only those cases outside of the city limits, those within the city falling to the care of the city health officer.

*Scarlet Fever.*—I have seen cases of scarlet fever scattered here and there, but it has not seemed to make headway, as in the last six months I have had only four cases reported to me; and, although undoubtedly there were a few cases of scarlet fever it did not spread to all the children even in houses where cases were found.

*Hookworm Disease.*—I have very little to report in regard to hookworm disease. My main practice has been in the city, where we have very few cases of the disease; in fact, I saw only two cases during the whole year. I understand that further out in the country there is a great deal of it.

#### HOLMES COUNTY

*John D. Gable, M. D., Agent*

During 1911 I have treated a great number of cases of hookworm disease, with good results in every case taking treatment

according to directions. Several charity cases have been treated at my own expense, as I find it almost impossible to get these patients to furnish the number of specimens of stool necessary to send to the State Laboratory to secure state aid.

During the year I visited some turpentine camps in Washington County in the interest of smallpox and vaccination, but no cases of the disease came under my supervision in Holmes County.

*Malarial Fever.*—I have treated several cases of malaria with quinine, and have insisted upon drainage and screening. Also insisted that ladies who would not have tin cans hauled off their premises, should punch a hole through bottom as soon as can was emptied. This appeal I made through the Holmes County Advertiser, our county newspaper, and I find some obeying the instructions.

*Typhoid Fever.*—Have insisted upon screening and careful burning of excreta and using great hygienic care.

We have at present an epidemic of measles and whooping cough; with only one death, from measles, an infant three months old.

Only two cases of pellagra have come under my observation, with one death, a white female. The other case, a white female, is now in the asylum for the insane.

I have made official inspections of places in and around Bonifay and have given instructions as to remedies and abatements. My suggestions have been carried out slowly but in a satisfactory manner.

I find the Florida Health Notes to be a good educational factor. They cause the public to talk of subjects beneficial to health, which they would not have known of except for the Notes.

Having been Agent of the Board during only a part of the year and having been inexperienced in such work, I have to hand in a report unsatisfactory to me, but a better report will be furnished next time.

#### JACKSON COUNTY

*Theophilus West, M. D., Agent*

The prevailing diseases of Jackson County during the year just closing have been largely of a malarial character, of the intermittent and re-mittent type, although these diseases for the period mentioned have been less prevalent than usual.

The general health conditions have been, perhaps, above the average, with the single exception of smallpox, which has been quite prevalent in some portions of the county during the entire year. Of smallpox I have had under my observation and management something over four hundred cases during the year, a majority of which, however, have been mild, there having been only one death registered among all the cases. There have been as many more cases, perhaps, under the observation and treatment of other physicians, and it is more than probable that there are and have been a number of unreported cases. The disease seems for the most part to have been confined to the negro race, as only a small percentage of the cases mentioned were among the whites. I have employed vaccination, isolation and all other means and remedies within my power to stamp out this loathsome disease, but owing to the general opposition to the application of these measures, especially among the negroes, it has been an exceedingly difficult task. More than three thousand persons according to my estimate, have been vaccinated in the county during the year, and it is my opinion that in from eighty to ninety per cent. of these cases the vaccination has been effective.

Something over two hundred cases of hookworm disease have been effectively and successfully treated during the year.

There has been quite a large number of cases of measles, both in the towns and rural districts, characterized, however, with few complications.

There has been a perceptible decrease in the number of cases of typhoid fever.

One case of scarlet fever and one of diphtheria occurred in the town of Marianna within the past two months. The origin of the infection could not in either case be determined.

Several cases of pellagra have occurred during the year both among the negroes and white people.

Very few cases of tuberculosis or pneumonia have occurred.

The sanitary conditions of the various towns of the county are not entirely satisfactory. The streets and alleys need to be made more cleanly. The populace seem to be indifferent to the importance of sanitation, but with the enlightenment and awakening that will necessarily come from the propaganda of the Health Board, there will come, I confidently believe, better conditions, and incidentally better health.

## JEFFERSON COUNTY

*J. R. McEachern, M. D., Agent*

(No Report)

## LAFAYETTE COUNTY

*C. A. O'Quinn, M. D., Agent*

(No Report)

## LAKE COUNTY

*W. D. Bush, M. D., Agent*

The health conditions of Lake County during the year 1911 have, as in previous years, been good. In the spring and summer some few cases of malarial fever and about one-half dozen cases of typhoid fever, occurred. During December quite a number of people have had acute colds, but no serious troubles such as pneumonia.

There were some cases of smallpox in the summer among the colored people of Leesburg and vicinity, but I want to state that every person who was successfully vaccinated did not contract the disease. Some of the cases were very severe and some quite mild—one family having smallpox so mild that there were simply a few pustules, with patients only slightly indisposed. All of the family would not be vaccinated, as the disease was so mild. However, the father contracted the disease and his case was quite severe. He lost much time from his work and often wished since that he had been vaccinated. Get vaccinated if you do not wish to have smallpox.

Since the citizens have been using screens and mosquito netting the prevalence of malarial fever has greatly diminished.

Flies and mosquitoes are dangerous to humanity. The State Board of Health through the monthly bulletin, has done a great deal of good in instructing the people in regard to these dangers—the fly as a carrier of typhoid, and mosquitoes in the transmission of malaria.

*Hookworm Disease.*—You will see on the streets no doubt, a few palefaced children. You suspect them of having hookworm disease, and if you go to the school house and examine the children thoroughly, about thirty or forty per cent. will be found to have anaemia and other symptoms of the disease. When Dr. Young



of the State Board of Health, was in Lake County, making an inspection, I went with him through the Leesburg High School, and must say I was quite surprised to find so many suspects. Am glad to know that the principal and the teachers are taking quite an interest in the treatment of these children for hookworm disease, and will assist all they can, with the children's parents and the physicians and the State Board of Health, in eradicating the disease.

There have been a few cases of scarlet fever which were very mild. We are using every precaution and do not think the disease will spread.

*Tuberculosis.*—I am glad to say that this disease does not seem to be on the increase in Leesburg nor its vicinity; in fact, there is a great deal less of it than in previous years. The natives are not so subject to the disease and the number of consumptives coming from other states to this section is small. The disease appears to be on the decrease or the sanatoria for such may be increasing for the treatment of that class of patients. While Leesburg and the neighborhood does not solicit consumptives, the doors of the hotels and boarding houses are open to them. Lake County, being in the center of the state, and as a rule, high and dry, asthmatics and persons suffering with pulmonary troubles are much benefited, providing they are not in the last stages of consumption when they come here. There are quite a number of people living in Leesburg and vicinity that came here years ago with consumption, and they are now in good health. My advice to those looking for health, is outdoor life and pure fresh air.

No cases of diphtheria, whooping cough, dengue or hydrophobia have been reported.

During May and June there were a few cases of measles, all making good recoveries.

Since my last year's report I do not believe that pellagra has been on the increase; in fact, I have no new cases to report, while those with the disease are physically in about the same condition.

Have not seen any cases of anterior poliomyelitis nor have any been reported to me.

This county has not had a regular medical inspection of the different schools, but this is an important matter and provision should be made for it. While we have good teachers and good school trustees and a good school board, they need a medical inspection in the schools at least twice during each term. Patrons

of schools will not call in their family physician until the child is sick. The State Board of Health with its County Health Agents, is trying to prevent disease, and by these regular inspections we would find out whether or not the physical condition of the child or student is up to the standard; whether puny, anemic or undeveloped according to age; the condition of the eyes; whether lids are granular and inflamed; defects in hearing could be detected in those children often supposed by the teachers to be dull or inattentive; the speech, articulation and breathing should be considered, for the child may have catarrh or a polypus may need removing; the child may have consumption and may drink out of or use the same glass or cup used by other pupils. In addition, there should be an inspection of the school water supplies, condition of toilets, heating and lighting systems, play grounds and yards, for these are all most important.

The town of Leesburg uses the open bucket system of sewage disposal; the toilets are cleaned once a week, with phenol freely used after each cleaning. Some of the hotels use wells and cess-pools in connection with water closets, which in my opinion is dangerous and should be regularly inspected.

The Leesburg water supply is from very deep driven wells, the water being forced into a large tank, and is supplied the town through iron pipes—a regular water system; most of the inhabitants, in fact all, except those on the outskirts or in the suburbs, use this water supply. The country people use open wells, springs and lake water, which is all very good except in the low lands where surface water is used, the water in some cases being only a few feet from the surface. This is not good and should not be used for drinking purposes.

#### LEE COUNTY

*A. P. Hunter, M. D., Agent*

(No Report)

#### LEON COUNTY

*F. Clifton Moor, M. D., Agent*

During the early months of the year 1911 smallpox was the only communicable disease occurring in anything like an epidemic form, and Leon County was the battleground for a period of about

six months. The first case occurred in the spring of 1910, but the disease did not assume epidemic proportions until the fall, when the movement of cotton to the market centers brought the rural population to town. The absolute impossibility of quarantining, or effectively isolating in any way the large majority of cases, was early realized, as our population is at least two-thirds rural and of the negro race.

Dr. E. W. Diggett, Assistant State Health Officer, was detailed here to take charge of the work and a vigorous vaccination campaign was begun. The Board of Trustees of the Leon High School made vaccination a prerequisite for attendance and a free vaccination dispensary was established here. Dr. Diggett and myself were kept busy for two hours each day. All of the practitioners in the county took up the work enthusiastically, and by June, 1911, there had been approximately ten thousand vaccinations in the county. The number of cases of smallpox occurring during the whole epidemic was approximately five hundred with seven deaths reported from the disease and complications.

The stand taken by the State Board of Health against quarantine was severely criticised by many citizens of the county and by visiting legislators, but numerous experiences during the epidemic have demonstrated that it would have been absolutely impossible to have maintained even a formal quarantine. A large majority of the cases were not known of until accidentally discovered, and very few were ill enough to be confined to their homes for more than a few days. Even in the city of Tallahassee perhaps fifty per cent. of the cases were never seen during the disease by any representative of the Board or by any physician.

The latter part of May Dr. Diggett left for his vacation and your agent was appointed Assistant State Health Officer for a period of two months. By this time the epidemic was under complete control, as there was only a small per cent. of non-immunes in the county; but isolated cases and localized epidemics continued to crop out during the entire summer and fall, and at the end of the year there was one locality in which the disease still existed.

Diphtheria and scarlet fever have existed as sporadic cases or as house epidemics. There has been no mortality as far as I can ascertain. Typhoid fever has occurred in certain parts of the town where there is as yet no connection with the city sewerage system. The number of cases in the city has been very small. There was

one severe outbreak of typhoid at Chaires, in the eastern part of the county, with eight or ten cases and one death.

Malaria has been more or less prevalent during the late summer and fall, but the number of cases has been considerably smaller and the mortality considerably less than during the preceding year. There have been very few cases of a pernicious type.

While acting as Assistant State Health Officer, I was supplied by the State Board of Health with twenty sets of typhoid vaccine and practically all of these were administered. The feasibility of vaccination against typhoid was thus brought before our public and a good many have since availed themselves of such immunity against the disease.

During the year the Womans Club began an agitation for medical inspection of the public schools and a paper on this subject was read by your agent before a public meeting of the Womans Club. As a result of this agitation, the Board of Trustees of the Leon High School has required examination of all teachers in the city public schools, but has not yet taken any steps toward the inspection of pupils. We hope that this may be taken up in the near future.

There is no data at hand from which we can get even an approximate estimate as to the general mortality for the past year. It seems absolutely impossible to get reports of births and deaths and until such reports are made to some county officer or to the State Board of Health direct, there can be no successful attempt to keep a record of vital statistics.

So far as I know, there has been only one case of anterior poliomyelitis and no cases of pellagra.

The Health Notes are very generally read and appreciated.

#### LEVY COUNTY

*J. H. Coffee, M. D., Agent*

Aside from hookworm disease and malaria, there has been little sickness in Levy County during the year 1911.

While the manner of handling the problem of the hookworm disease is all that could be asked for from the viewpoint of those who are informed, it is far from being efficient. It is not free treatment of this disease that is needed so much as education along the lines of the tragical results of the untreated cases. Literature on this important subject does not reach the people for whom it is intended. The people who most need the help never read. It must be told to them



by some one whom they do not know. The worms must be shown to them, as also the eggs with the aid of the microscope. The situation must be presented to them in such a manner that they will be able to grasp it. Many of the ignorant people believe that it is a disgrace to be inhabited by any kind of animal parasite. This is the class of people who, unfortunately, most need our help. These people make frantic efforts to protect their hogs from cholera and at the same time permit their children to be exposed to the deadly effect of the hookworm. This is not because they do not love their children better than they do their hogs, but because they are blindly ignorant. We have sure methods of diagnosis, a reasonably sure cure for the disease, and free treatment for the indigent, but yet there is a problem to solve, and it is certainly a worthy subject to study, with prospects of making efficient the great and good work that is being attempted.

1911 was certainly a bad one for malaria in Levy County. In the western part of this county the number of cases was not only great, but it was of a very malignant type. What may be a very remarkable feature is the absence of the disease in the town of Cedar Key. I do not know if this obtains in all coast towns and I would like to see a report along this line. I have never seen a single case that was contracted in Cedar Key, while only four miles away there have been epidemics in which hardly a person in the community escaped. With reference to the prophylaxis of this disease, it would perhaps be well to emphasize the importance of a radical cure during the winter months. With our present means at hand it is impossible to avoid all of the *Anopheles* mosquitoes.

I have not heard of more than two or three cases of typhoid fever in the county. There were a few cases of smallpox and many people availed themselves of the opportunity to be vaccinated, while of course there are enough left unvaccinated to keep that disease with us.

#### MADISON COUNTY

*L. C. Ruter, M. D., Agent*

During the past year we have had a remarkably healthy year. There have been no epidemics, with the exception of smallpox, which we have had in the county all the year, and still have a number of cases in the county. There are five or six at this time about one mile west of Madison.

We have had only three or four genuine cases of typhoid fever in the county this year, and only two cases of tuberculosis. We have had a good deal of ague since the cold weather and frost came, but very little malignant malaria. Two cases of anterior poliomyelitis have been reported.

I think we have come nearer to cleaning up the hookworms in this county than any other county in the state. The people in the most remote parts of the county have learned what hookworms are and also know their children can be relieved, and they do not hesitate to bring them in for treatment.

#### MANATEE COUNTY

*Joseph Halton, M. D., Agent*

We have had two cases of typhoid fever during the year, which were not of a severe type. Malaria has played a small part in the general sickness of the year. Hookworms are abundant and we find a number of cases that seem to resist repeated and large doses of thymol. Otherwise, the general health of the county is good.

#### MARION COUNTY

*W. V. Newsom, M. D., Agent*

It affords me much pleasure as your agent to submit this as my report for Marion County for the year ending December 31, 1911. The health of Marion County has been exceedingly good during the entire year, and it is gratifying for me to say here at the end of the year, the index finger points to a continued improvement in the health conditions of our county. The citizens now have a better and more complete knowledge of the causes that tend to produce sickness and disease, and at this time realize more fully that the health and happiness of a home depends not only upon the cleanliness of its immediate surroundings, but also upon conditions somewhat remote. They have accepted the theory that both the mosquito and the fly are transmitters and distributors of the germs of disease, and have gone valiantly into the fight to do battle, if not for the total extermination of, at least to diminish the number of these pests. Of course, the warfare now going on is not as yet a concerted action, but, judging from improvements everywhere in the methods of disposing of sewage, waste water, garbage, putrescent and refuse matter from kitchens, I am con-

vinced that ere long the forces will join together with the fixed purpose of ridding our county and state of these two great enemies to the physical well-being of mankind.

A number of cases of hookworm disease have been treated. Those affected have submitted readily to treatment and very few difficulties have been met with in effecting cures.

The few persons we have treated for tuberculosis were persons who came from northern latitudes; therefore, this disease here during 1911 was altogether introductory.

During the year 1911 there were 46 cases of smallpox in Marion County with but few deaths. The spreading of the disease was prevented by vaccination.

On account of the better knowledge obtained by the people of Marion County as regards preventives and the great improvements made in the sanitary conditions of homes, both in city and on farms, malarial fevers are less frequent and of milder types.

We have noted a few cases of typhoid fever here during the year. A number of our physicians in their practice have used anti-typhoid vaccination with apparent success, and this preventive treatment is rapidly growing in favor.

We have had reported during the year 41 cases of diphtheria, 32 cases in the city of Ocala and 9 cases in the country districts.

There have been reported 38 cases of measles in the city and 10 in the country, but no cases of dengue fever, hydrophobia or other kinds of communicable diseases.

It is gratifying to know that the citizens of Ocala and Marion County so fully realize the benefits and blessings of good and perfect health, and that, not only the city of Ocala, but the entire county, is aroused and that each and every community is being placed on the highest plane of sanitary immunity from all forms of infectious diseases. This betterment of health and sanitation throughout the county is the outcome of the effective and efficient work of our State Board of Health, Florida Health Notes, the Ladies' Civic League, and the public press at large.

#### NASSAU COUNTY

*D. G. Humphrey, M. D., Agent*

(No Report.)

#### ORANGE COUNTY

*P. P. Pillans, M. D., Agent*

During the year 1911 we had cases of diphtheria, smallpox and typhoid fever. Two or three deaths occurred from diphtheria. Infected children and those exposed were given the antitoxin.

Vaccination has about stamped out smallpox. We had only a few cases of the disease.

No common source of the infection in typhoid fever could be found for the few cases occurring.

The county's health in general has been good.

#### OSCEOLA COUNTY

*M. J. Hicks, M. D., Agent*

As we have just passed the milestone of 1911, it now becomes my duty to render to you an account of the varied health conditions prevailing in our county during the past year.

*Hookworm Disease.*—The first I shall notice is the one most neglected and at the same time the most glaring of all the maladies with which we are afflicted in Florida. I think the cause of neglect is due in great measure to the fact that parents have not been educated to the danger to their children from this parasite, especially in the rural districts. They are pregnant with the old idea that the child is a dirt eater and will grow out of it without treatment. I should estimate from the best information obtainable that there have been about fifty cases treated in this county during the year, and I should say ninety per cent. successfully.

*Tuberculosis.*—I venture on this subject with uncertainty because of the migrating population with which we have to contend. It has been my observation that comparatively few of the native Floridians are afflicted with tuberculosis and the foreign elements come and go so often that it is difficult to keep track of them. I could not say how many cases have been treated, but believe that one-half dozen will cover the death list from the disease. It has been my experience that people coming to this county afflicted with tuberculosis, and who live in the open air and have plenty of good, substantial, nourishing diet, and who remain here through the summer months, are materially benefited, at least in fifty per cent. of the instances.



*Smallpox.*—The number of cases of smallpox last year were few, owing to the general use of vaccine. From every opportunity presented, especially in the turpentine camps and other places where people have been crowded together, I have come to believe that quarantine plays but a small part compared to vaccination in the management of the disease. If the people were universally vaccinated, there would be no necessity for quarantine. There were about fifteen cases of the disease during the year, with no deaths.

Malarial fever is never prevalent in this county to any extent; therefore, I can report but a very few cases, and as the years go by we have fewer, owing to the fact that the municipal government of Kissimmee and the people generally are making war upon the mosquito-breeding places.

We have had probably thirty-five cases of typhoid fever, with a mortality of five per cent. I have no knowledge of any anti-typhoid vaccine having been used.

Kissimmee has an up-to-date water plant and sewerage system. Our milk is furnished from a dairy that is sanitary in all of its departments and surroundings.

We have had one case of diphtheria, very malignant, but treated successfully with antitoxin. There have been no cases of measles, scarlet fever, whooping cough, dengue, hydrophobia or other communicable diseases, except those mentioned.

I have heard of but one case of pellagra and no deaths as yet. Anterior poliomyelitis, one case with one death.

I have inspected different localities in the county and find the county generally in a healthy and sanitary condition. The greatest nuisance that we have is the housefly, but, as we improve in modern methods, I think the fly problem will be finally solved by more rigid sanitary measures, especially if we continue to urge upon the people the necessity of more stringent sanitary usages in every department of the home.

I find that Florida Health Notes is doing good work in the county along sanitary lines. Am sorry to say that we have not as yet any medical inspection of schools, though it is a proper thing to institute.

The newspapers of the county could be an agent through which a vast deal of sanitary work could be done, and I find our papers are waking to its importance. We have no health organizations except our ladies' "Village Improvement Society," and I cannot

say too much in their praise, for they have certainly not failed to point out public nuisances to the town authorities and urge upon them the necessity for abatement. Florida Health Notes is the only public health literature we receive.

#### PALM BEACH COUNTY

*C. M. Merrill, M. D., Agent*

The most important matter of sanitation concerning Palm Beach County occurring within the past year is the authorizing of the issue of additional bonds by the city of West Palm Beach for civic improvements; of the funds available at an early date, sixteen thousand dollars have been appropriated for additional sewers.

Of the contagious and infectious diseases the county has had more than its share. Typhoid fever, ten cases. Smallpox, two cases, which, occurring in succession, were treated under the tent method, which proved satisfactory to the public and the patients. Diphtheria has prevailed in the southern part of the county, eight cases having been recognized and two deaths having resulted therefrom.

#### PASCO COUNTY

*W. E. Seay, M. D., Agent*

(No Report.)

#### POLK COUNTY

*C. W. Love, M. D., Agent*

(No Report.)

#### PUTNAM COUNTY

*E. W. Warren, M. D., Agent*

Health conditions have not differed the past year from former years greatly, except in minor detail. About fifty cases of smallpox have occurred. A few deaths (two that I know of) have occurred from tuberculosis. One small outbreak of typhoid fever, on the eastern side of the St. Johns River, in which there were six deaths, was the most noticeable change from last year. Two cases of scarlatina in Palatka were reported. Some measles and mumps appeared, the former in the spring, while the latter is prevalent at the present time.

Little general attention has been given to the treatment of hookworm disease. Only one physician in the county has taken any interest in the subject, although the disease exists here to a very large extent.

So far as I know, only two cases of pellagra exist in the county, and no deaths occurred from it during the year. One case of anterior poliomyelitis has come to my attention, and it is gradually improving.

Nothing is being done to prevent mosquito breeding or to prevent the spread of typhoid fever. Our county has no health authority, nor has the city. Attention has repeatedly been called to this matter by the local agent of the State Board of Health, but no effort has been made to correct it. No public lectures have been made upon health subjects, although the Ladies' Fortnightly Club have asked for a lecture by Dr. Byrd of the State Board of Health at the time of their next or annual meeting which occurs in a few days, on any subject he may select. They suggest medical inspection of schools, which has been begun in the Palatka schools in a small way, or inspection of milk supply, or hookworm disease.

The vital statistics of this county are not accurate by any means. Only a few of the physicians of the county and a small per cent. of the midwives furnish reports to the State Board of Health, so far as I can find out. The importance of this work does not seem to be appreciated by them.

Florida Health Notes is of immense importance to the people of this county. A vast amount of information is imparted to the ones who read it. I would like to see it mailed to the head of every family in the state. Other literature on health and allied subjects gotten out by the Board has created a lot of interest, especially the "Typhoid Primer" recently out by Dr. Byrd. I should like to see every family in our county have a copy of it.

#### ST. LUCIE COUNTY

*W. E. VanLandingham, M. D., Agent*

(No Report.)

#### ST. JOHNS COUNTY

*E. S. Estes, M. D., Agent*

1911 has been a very healthy year, with very few cases of communicable diseases. Absolutely correct statistics are difficult to

get, as the physicians do not report these diseases excepting smallpox, scarlet fever and diphtheria. The following will show all cases reported to me.

Smallpox, in St. Augustine, 3 cases, one death, malignant type.

Scarlet fever, 8 cases, no deaths.

Typhoid fever, about 10 cases, none contracted here.

Tuberculosis, several deaths, no cases reported.

Hookworm disease, not very prevalent.

Pellagra, none.

Diphtheria, two cases.

Not very much is being done in regard to the care of children in school, at present, but a movement is on foot to have examinations made twice a year by local physicians who are willing to do this work.

The general health conditions in St. Augustine are splendid.

#### SANTA ROSA COUNTY

*H. Mason Smith, M. D., Agent*

The year 1911 was marked with improvement in the sanitary conditions of this community (Milton). Several sanitary ordinances were enacted, which were rigidly enforced, and which have had a far-reaching effect on the public health. Among them was an ordinance providing for screened and sanitary privies and for a Sanitary Inspector. Confectioneries and fruit are also required to be screened. Drainage has been improved and several sanitary nuisances have been removed.

We have had smallpox from the first of the year until June. As the people are seeing more the necessity of being vaccinated, and as they submit to vaccination, it was only in communities where the disease was not reported that there was any noticeable spread.

Measles has existed in the county in epidemic proportions almost the entire year, one community after another being invaded, until the almost isolated communities have been reached and the entire county covered.

Ten or twelve cases of typhoid fever, four cases of sporadic meningitis, have been reported at various times during the year. There were no cases of scarlet fever, diphtheria, or anterior poliomyelitis reported.



Hookworm disease is common in this section, but the people are recognizing the disease and are being treated and it is being rapidly eradicated.

The Health Notes are appreciated by the people and they have been a great factor in ameliorating hookworm disease and in educating the people in other health matters. More houses are being screened, more people are being vaccinated and more sanitary precautions are being taken than ever before. In comparing this with other years one can justly say that more progress has been made in public health and sanitation than ever before.

#### SUMTER COUNTY

*S. C. Wood, M. D., Agent*

In making my annual report as to health and sanitary conditions existing in Sumter County during 1911, it affords me pleasure to say that we have had but little sickness of severe nature.

In the early spring several cases of pneumonia were reported, mortality very low. Some few cases of typhoid fever were reported during the summer. We had an outbreak of typhoid in Webster during August, six cases altogether, mortality 50 per cent. This is the first typhoid in this town in eight years. Was unable to find its origin.

A few cases of smallpox were reported in the northern part of the county. These cases were not seen. One case was located in Webster late in December; have this case in charge now; no new cases.

There is quite a decrease in the number of cases of uncinariasis in this section, due to the fact that the people in the rural districts are becoming more educated along this line, and that the physicians all over the county urge treatment for all cases found. We are awake to the fact that thymol in heroic doses is a specific.

I feel that the Florida Health Notes have done a vast amount of good in the rural districts, and am continually urging the people to read them, especially articles on the hookworm.

We are finding fewer of the graver types of malaria each year, due I think to a decrease in the number of cases of uncinariasis, drainage of the low lands, and a better mode and manner of living.

We have not had a case of pellagra in this county.

#### SUWANNEE COUNTY

*W. C. White, M. D., Agent*

(No Report.)

#### VOLUSIA COUNTY

*John McDiarmid, M. D., Agent*

Volusia County has been very fortunate this year in that we have had no epidemics of any consequence.

Smallpox has been reported among the negroes, from several different sections of the county, but a great majority of the cases had such *very small* pox as scarcely to deserve the name. I often wonder why none of our white residents nor tourists, unprotected by vaccination, "catch" this disease. They are frequently exposed to it, yet have been immune so far, and even the negroes have it in such mild form that it is seldom that any of them with smallpox are confined to bed. No deaths have been reported.

Hookworm disease, on the other hand, seems to be confined to the white population. It is quite general among the children, and occasionally we find an adult who "has been ailing for years" without anyone suspecting him to be a "hooker." I recall one case of a man of over sixty years who hadn't felt quite well since the war, and "had suffered many things of many physicians," but was cured of most of his troubles by a few doses of thymol.

We have had but very few cases of diphtheria, scarlet fever, measles or whooping cough.

Malaria prevails, mostly in the country districts, during the summer months, but draining of stagnant water and screening of doors and windows are materially reducing the number and severity of cases of the different types of malarial fever year by year.

Tuberculosis is rare among the natives, and most of the sufferers from the white plague who come from other states to live on our pine hills promptly recover *if they only come in time*.

Pellagra claims its victims here and there, and will continue to do so until we know its cause, which I doubt is either corn or cotton seed or sand flies.

Health Notes, newspapers and popular lectures on sanitation are doing valuable service among the masses in educating them to the importance of keeping the housefly outside the home and thus preventing much typhoid fever.

On all sides we see evidences of the good accomplished by the campaign for better hygiene and better health inaugurated and vigorously pushed by the State Board of Health.

#### WALTON COUNTY

*C. B. McKinnon, M. D., Agent*

We have had the usual amount of sickness during the year. A few cases of smallpox have occurred throughout the county, but not as an epidemic at any point. There has not been a case of typhoid fever reported during the year. There has been a lasting epidemic of whooping cough in the county during nearly the entire year, and we are now in the throes of an epidemic of measles. No deaths so far have been reported. Three cases of whooping cough have been reported fatal in children.

The usual number of tuberculous patients are coming in at this time of the year, and some will remain here permanently. Of the number who had previously come here, all are improving. There has not been a death from tuberculosis in the town of DeFuniak Springs during the year. Only three deaths have been reported in the county from this disease. This is somewhat remarkable, considering the number who live here and the number coming here during the winter months.

There are no cases of pellagra in the county that I am aware of and no new cases since my last report. Of those reported, three recovered and the others died.

In the western section of the county, there have been quite a number of cases of infantile paralysis. Thirteen cases have been reported. Of these, seven occurred at a turpentine still all within seven days. Two of the cases were white, the other five negro, children. The other six cases were scattered throughout the different neighborhoods in that part of the county. At the turpentine still, where the seven cases occurred, none of the children had been over five miles from the still in a year. No deaths have been reported from the disease.

Two cases of diphtheria were reported during the year, with no deaths.

Interest in hookworm disease is kept up by nearly all the physicians in the county. All agree that it is impossible to get the patients to continue treatment long enough to entirely rid them of the

parasite. There is, however, a marked improvement in home sanitation throughout the county.

We had hoped in this report to give some information on medical inspection of our schools, but this will have to be delayed until we are able to elect a set of men on the County School Board who are capable of distinguishing the value of a few dollars earned by incompetency, and the necessity of improving the health of our school children.

#### WASHINGTON COUNTY

*F. C. Wilson, M. D., Agent*

The year just closed has been reasonably healthy, no serious epidemics having reached us. Malaria, the prevailing disease in some localities of this county during the summer and fall months, has not been above the average in severity the past season. No extra effort has been put forth to prevent mosquito breeding.

Smallpox has been prevalent in a mild form in various sections of the county during 1911. Only two severe cases have come under my observation. Vaccination and isolation have kept it under easy control. No deaths to report from this disease.

We have a few widely scattered cases of tuberculosis in this county, and spare no pains to impress upon the sufferers and their immediate families the great importance of destroying all sputa and dejecta to prevent a further spread of the great white plague.

Our county has been blessed as concerns typhoid fever during 1911. Only a few cases reported and they were of a mild type.

Hookworm disease is more prevalent than is generally supposed. We offer treatment to all who will accept, but the people usually seem superstitious about the treatment, and many refuse to have it administered.

At present there is a general epidemic of measles in the county. Other communicable diseases have been so scarce that they are not worthy of mention.

Very few cases of pellagra have been recognized so far here. One death only to report.

Our county at large is so very healthy that public health lectures are not deemed necessary.

No correct form of vital statistics is kept in this county.



Our public schools are so well organized and are kept in such sanitary condition that no medical inspection has been found necessary.

Accept my kindest regards with wishes for a prosperous year for you and the noble work of your able corps of assistants and the wonderful work you are doing with Florida Health Notes.

## REPORTS FROM CITY BOARDS OF HEALTH

DAYTONA, FLA.

*G. A. Klock, M. D., City Health Officer*

The following deaths occurred during 1911:

Month	Male	Female
January	1	—
February	2	5
March	3	3
April	3	5
May	4	5
June	0	0
July	4	0
August	4	2
September	3	1
October	2	0
November	4	2
December	2	5
Totals	32	28

The health of our city has been excellent during the past year. There have been only ten cases of typhoid fever and three cases of diphtheria, among the communicable diseases. There is no record of the births occurring here.

JACKSONVILLE, FLA.

*C. E. Terry, M. D., City Health Officer*

(FROM 1911 ANNUAL REPORT OF THE CITY BOARD OF HEALTH.)

BIRTHS RECORDED DURING 1911 WITH SEX AND COLOR

Month	White		Colored		Total		Grand Total
	Male	Female	Male	Female	Male	Female	
January	26	23	30	31	56	54	110
February	23	23	27	27	50	50	100
March	27	21	31	24	58	45	103
April	20	24	16	15	36	39	75
May	13	14	24	17	37	31	68
June	25	19	16	21	41	40	81
July	24	22	19	22	43	44	87
August	14	20	9	20	23	40	63
September	19	29	21	19	40	48	88
October	33	23	26	27	59	50	109
November	15	21	20	25	35	46	81
December	29	35	16	19	45	54	99
Total	268	274	225	267	523	541	1,064

## DEATHS RECORDED DURING 1911

Month	White	Black	Totals
January	45	70	115
February	38	77	115
March	64	89	153
April	44	78	122
May	49	72	121
June	42	70	112
July	33	68	101
August	39	62	101
September	31	71	102
October	47	62	109
November	43	57	100
December	51	65	116
Totals	526	341	1,367
Less Non-Residents			237
			1,230

\* See Appendix for other excerpts from 1911 Annual Report of the Jacksonville State Board of Health, in regard to Hydrophobia and Typhoid Fever in Jacksonville, 1911.

## KEY WEST, FLA.

*S. D. W. Light, M. D., City Health Officer*

## REPORT OF BIRTHS BY RACES AND BY MONTHS, 1911

Month	White	Black	Stillborn	Total
January	48	19	4	71
February	34	10	1	45
March	46	14	3	63
April	28	13	1	42
May	23	15	1	39
June	37	5	1	43
July	27	7	1	35
August	52	25	2	79
September	54	15	1	70
October	46	17	3	66
November	39	20	1	60
December	30	19	0	49
Totals	466	179	19	664

## REPORT OF DEATHS BY RACES AND BY MONTHS, 1911

Month	White	Black	Total
January	36	18	54
February	25	18	43
March	41	30	71
April	32	11	43
May	38	12	50
June	20	10	30
July	19	10	29
August	15	10	25
September	21	11	32
October	12	19	31
November	16	8	24
December	20	10	30
Totals	295	167	462

Still-births are not included in the above figures.

## MADISON, FLA.

*D. H. Yates, M. D., City Physician*

In complying with your request for a statement of the health of our town during 1911, I will state that I have no accurate record of the births and deaths which occurred during the year, but the health of our town has been greatly improved by reason of the fact that we have installed a sewerage system in the latter part of 1910. The sewage is disposed of in a septic tank about one mile from town. This system we find eminently satisfactory. It has almost eliminated typhoid fever from the place. There have not been more than four cases in the town since the system has been installed, and these were visitors from other places. In neither case was any person infected from any of the four cases.

We had one little epidemic of smallpox, which was quickly terminated by vaccination and by isolation of the cases.

No cases of diphtheria have been reported.

Hookworm disease has been practically eradicated from our community.

Four cases of pellagra have occurred, one case coming here from DeSoto County, Florida. The State Board of Health is doubtless familiar with this particular case, as he wrote you on several different occasions in regard to pellagra, from that county. All four of these cases have been permanently cured by a high potential electric current.

We have a very good location here for lung troubles, Madison being on a very high hill and well drained. We are ninety feet higher here than Valdosta, Ga. The town is only fifty miles from the Gulf coast, which gives us some sea breeze without the accompanying dampness of nearer points.

Not much has been done as yet towards the extermination of the mosquito, but, thanks to the Health Notes, through it our people have been so educated on the subject that houses have been screened and mosquito nets used until malaria has been wonderfully reduced in its prevalence.



## OCALA, FLA.\*

*E. Van Hood, M. D., President Board of Health*

The health of the city for the past twelve months has been excellent.

Births:	
White males -----	12
White females -----	8
Black males -----	8
Black females -----	9
Total -----	37
Deaths -----	35
Cases of scarlet fever -----	8
Cases of typhoid fever -----	6
Cases of measles -----	38
Cases of diphtheria -----	32
Cases of pellagra -----	7
Cases of smallpox -----	7

The above is the nearest to a correct report of vital statistics that this office has ever made. No arrests for failure to report births and deaths were made during the past year but the *threat* was made in real earnest in January, 1911, and it is just possible that this is why so many cases have been reported. The Board hopes to do even better in 1912.

Your health officer feels that this work should be done by some live citizen of Ocala, not a physician. Many cities are doing it that way.

The Board has met in executive session but three times this year. Once in company with a member of the Womans Club and a member of the Auxiliary Hospital Association, when they inspected the city market in detail; once to inspect the dumping grounds near Taylor Pond; and once to inspect a livery stable which was giving trouble to the neighborhood on account of its unsanitary condition.

Smallpox panics have been on our hands in localities and naturally the citizens of these localities came to the Board of Health for advice and assistance, although in one instance our County Commissioners were appealed to for help. The County Commissioners conferred with the City Board of Health in this case and the latter was able to do all that was necessary to relieve the situation—the panic.

\*This report is a copy of that made by Dr. Van Hood to the Mayor and City Council of Ocala.

Martel, Citra, Summerfield, Fort McCoy and Burbank each have had trouble with cases of smallpox. The pest-house is what each plaintiff thinks is the only "thing needful," but the pest-house is not only unsatisfactory in every way, but it is a failure scientifically. Vaccination is the only solution of the problem and this is the position which the Board takes in every instance.

During the year one of the local physicians was bitten by a rabid animal, and anti-rabic vaccine was furnished by the State Board of Health for administration.

In the spring we had some cases of diphtheria among our indigent population, and the Board asked the City Council to provide free antitoxin. This the City Council did. The State Board of Health, on being advised of the action taken, instructed your local health officer to continue to call on the State Board for antitoxin for the indigent patients, whether for Ocala or Marion County. So there has been no expense in that direction to this department.

The city needs an Inspector of Dairy and Market products. Many diseases come to us through these channels, and most of them are preventable.

Several members of the Board from time to time inspected the dairy of Mr. Jack Camp and not only pronounced the system and methods good, but getting better. This is an entirely new enterprise, and was constructed at no little expense and care.

Health Day in the calendar of the Womans Club fell on April 4th. Two local physicians and one dentist prepared articles on the physical examination of school children, and a minister gave a lecture on the subject. On that occasion the Health Department of the Womans Club secured Dr. C. T. Young, Assistant State Health Officer, who lectured interestingly on prevalent diseases and their prevention. They also secured a film of moving pictures from the State Board of Health, showing the habits of the housefly.

Anti-typhoid vaccination is gaining ground. This is, as you know, a preventive treatment, and in the past year it has been used in Ocala many times. The treatment is practically harmless. The results reported from the United States Army statistics are little short of miraculous.

Pellagra has appeared in Ocala to the extent of seven cases. Two were sent to Chattahoochee, to the State Hospital for the Insane, on account of their demented condition, three died, and

two are under treatment here. The disease cannot be pronounced contagious, since it is rare that two or more cases occur in the same house or family, but there is some difference of opinion on that subject.

The Board desires to express obligations to the State Health Officer, Joseph Y. Porter, and his efficient staff, and to our local Womans Club, for very satisfactory co-operation.

ORLANDO, FLA.

*W. C. Person, M. D., City Physician*

I have tried to comply with your request in regard to vital statistics. The clerk has done his duty as well as he could, though the report is tardy. I have not the time at present to do what I would gladly do to help you. Accompanying this report will be found a tabulation of births and deaths.

Our effort against hookworm disease is individual. After tuberculosis, houses are disinfected. To prevent smallpox, we vaccinate. Malaria does not exist here. Typhoid fever is very rare, and precautions are always taken to prevent its spread.

The sewerage system here consists of deep wells, cess pools and open buckets.

Our water supply is soft and good lake water.

Death from the zymotic fevers rarely occurs. Pellagra and anterior poliomyelitis are almost unknown here.

We have a sanitary inspector who looks after the bucket and cess pool systems, and garbage is hauled out of town and burned or used as fertilizer.

We have no medical inspections of schools, and no health organizations in the city. The newspapers here could be used to advantage if an effort was made in this direction.

Our community is not as keenly alive to the pertinent phases of sanitation, I am sorry to say. We need filtered water and a sewerage system. These we hope to get some time in the future. Nature has done so much for Orlando that she cannot appreciate the necessity of improvement.

# REPORTS OF BIRTHS IN THE CITY OF ORLANDO, 1911

Residents:		
White:		
Male	-----	16
Female	-----	16
Black:		
Male	-----	3
Female	-----	1
Non-Residents	-----	0
Total	-----	36

The reports of births are believed to be incomplete.



RECORD OF DEATHS REPORTED IN THE CITY OF ORLANDO, 1911

Cause of Death	Residents				Non-Residents				Total W. Residents	Total B. Residents	Total W. N.-Res.	Total B. N.-Res.	Total Deaths.
	White		Black		White		Black						
	Male	Female	Male	Female	Male	Female	Male	Female •					
Tuberculosis	2	2	4	3	2	2			4	7	4		15
Heart Failure	3	3	1		3				6	1	3		10
Apoplexy	1						1	1	1			1	2
Secondary hemorrhage													1
Cirrhosis of liver		1	2						1	2			3
Exhaustion					1						1		1
Senility	1	2	1	1	1				3	2	1		6
Cerebral hemorrhage				1	3					1	3		4
Bronchitis			2	1						3			3
Unknown causes			3	4						9			9
Chronic nephritis	1	2		2					3	2			5
Nephritis			3		1	1				3	2		5
Diphtheria		1							1				1
Still born		2	3	2					2	5			7
Pernicious anemia					1	1				2			2
Pneumonia	1		1	3	3				1	4	3		8
Dropsy			1	1	1					2	1		3
Gastro enteritis					1						1		1
Palsy					1						1		1
Paralysis	1								1				1
Spina Bifidi	1								1				1
Typhoid fever	1	1			2	3			2		5		7
Angina pectoris	1						1		1			1	2
Gunshot wounds							1					1	1
Bright's disease				1		1				1	1		2
Internal injuries					1						1		1
Illens							1					1	1
Ptomaine poison					1						1		1
Peritonitis			1							1			1
Chols. Cystitis				1						1			1
Tuberculosis of bones					1						1		1
Cancer		2		1			1		2	1		1	4
Intestinal obstruction					2						2		2
Cerebral embolism					1						1		1
Edema of lungs					1						1		1
Auto Intoxia	2	1							3				3
Entero Colitis	1								1				1
Abcess of brain		1							1				1
Arteriosclerosis	1								1				1
Pancreatitis		1							1				1
Puerpal albumena		1							1				1
Carditis	1								1				1
Measles			1							1			1
Uremia	1								1				1
Internal hemorrhage			1							1			1
Carcinoma				1						1			1
Dysentery	1								1				1
Diabetes	2					1			2		1		3
Totals	22	20	26	22	27	9	5	1	42	48	36	6	132

STATE BOARD OF HEALTH OF FLORIDA

PENSACOLA, FLORIDA

Wm. D. Nobles, M. D., City Health Officer

Complying with your request of February 1, 1912, I have the honor to report the following health conditions in the City of Pensacola during the year 1911.

Births:	January	February	March	April	May	June	July	August	September	October	November	December	Total
White: Male	22	17	9	11	8	15	22	13	14	23	17	20	191
Female	15	12	15	5	9	14	12	15	15	23	18	16	169
Black: Male	14	8	6	13	6	10	3	20	11	12	7	12	122
Female	13	9	13	8	8	9	9	10	7	12	13	10	121
	64	46	43	37	31	48	46	58	47	70	55	58	603
Deaths:													
White: Male	12	5	10	10	8	10	10	13	9	16	18	11	132
Female	11	6	6	5	9	12	12	5	8	9	7	8	98
Black: Male	10	3	15	23	13	15	11	13	17	17	6	15	158
Female	9	9	13	11	22	13	16	16	6	11	11	19	156
	42	23	44	49	52	50	49	47	40	53	42	53	544

The death rate, based upon 25,000 population is 21.7 per thousand. The above death rate includes non-residents buried in this city. Included in the above deaths, the following numbers were reported from communicable and other diseases as specified:

Diphtheria	0
Measles	4
Scarlet Fever	0
Whooping cough	7
Dengue	0
Hydrophobia	0
Malaria	3
Pellagra	8
Anterior poliomyelitis	0
Tuberculosis	39
Typhoid fever	33

All residences in the city are inspected tri-monthly by the Sanitary Inspectors employed by the city, under the direction of the City Health Officer. All sewage is disposed of through the city sewerage system, which empties into the bay 3,000 feet from shore in twelve to seventeen feet of water.

Water for all purposes in the city is supplied from artesian wells by the Pensacola Water Works Department, owned and operated by the City of Pensacola.

The duties of all inspection of meat and milk are in charge of the City Health Officer, and milk is inspected regularly by this Department according to the ordinances of the city now in force; all packing houses and meat markets are inspected daily.

PUNTA GORDA, FLORIDA

*Geo. S. Stone, M. D., City Health Officer*

VITAL STATISTICS

Births: 30—males, 20, females 10.

Deaths: 8—males 5, females 3.

Deaths distributed and caused as follows:

January .....	0
February .....	0
March .....	0
April .....	1 male, age 5 months, ileo colitis.
May .....	1 male, age 80 years, paralysis, (operation).
June .....	2 males, one age 30 years, appendicitis; one
July .....	0 age 40 years, heart failure.
August .....	1 female, age 40 years, accidental poisoning.
September .....	1 male, age 14 years, appendicitis, (oper-
October .....	0 ation.)
November .....	1 female, age 60 years, cancer.
December .....	1 female, age 74 years, senility.
Total .....	8

Communicable diseases:

Tuberculosis .....	0
Diphtheria .....	0
Hydrophobia .....	0
Dengue .....	0
Scarlet Fever .....	3
Measles .....	8
Whooping cough .....	10
Typhoid Fever .....	6
*Malarial Fever .....	5
Smallpox .....	3
Anterior-poliomyelitis .....	1

\* Only one case contracted here, others imported.

One case of pellagra was cured during the year. No cases of anterior poliomyelitis have been reported.

The sanitation of our city is first class. We make a house to house inspection, and compel every one to keep their premises in a sanitary condition.

Vaccination is enforced as far as it is possible to do so.

All horse stables and fly breeding places are looked after and unsanitary conditions abated. Located as we are on salt water we have very few mosquitoes. A native Punta Gordian has never

been known to have tuberculosis. Our water supply is from flowing artesian wells which is absolutely pure water and free from any contamination. Population 2100.

ST. PETERSBURG, FLORIDA

*M. H. Axline, M. D., City Health Officer*

Replying to your letter of the 1st instant, I am afraid we cannot give you as good a report as we would like at this time as the Health Office has only been recently established in this city. The work at present is mainly that of getting the books and outlining the general plan of work. We have at the present time some plans in the hands of printers for the new books, which will enable us to give promptly any statistics called for. I hope to be able to use them for all the work of this office beginning January 1st, 1912.

It is not possible to give the births for 1911 as no record has been kept of them.

The report of deaths can be made fairly accurate as the certificate required before the burial permit is issued, was designed after that required by the State Board of Health. During 1911 there were a total of 111 deaths, of which 65 were residents and 44 non-residents. Two were not specified. 87 were white and 22 black, with 2 not specified. 58 were males and 52 females, with one not stated. By ages as follows:

1 to 5 years .....	26
5 to 10 years .....	1
10 to 20 years .....	5
20 to 30 years .....	4
30 to 40 years .....	17
40 to 50 years .....	10
50 to 60 years .....	12
60 to 70 years .....	12
70 to 80 years .....	17
80 to 90 years .....	6

The deaths were from the following causes:

Epidemic diseases .....	11
General diseases .....	19
Circulatory diseases .....	10
Nervous system .....	12
Respiratory system .....	6
Digestive system .....	16
Genito-urinary .....	12
Childbirth .....	2
Malformations .....	1
Early infancy .....	14
Senility .....	1
Violence .....	4
Not given .....	3



Deaths were distributed by months as follows:

January -----	7
February -----	10
March -----	17
April -----	15
May -----	3
June -----	6
July -----	6
August -----	10
September -----	6
October -----	15
November -----	8
December -----	8

Our population here is, as you know, quite variable. We have a permanent population of 5,000 but for three months of the winter it is not less than 15,000, and a fair average for the year is probably not far from 8,000. Another thing that affects the death rate is the large number of elderly people who come here. This is proven by the large proportion of deaths among the aged.

We do not recommend this locality for the cure of tuberculosis especially the pulmonary form, as the low altitude calls in play but a small portion of the respiratory area and leaves the infection undisturbed in other portions. The salt atmosphere has not been proved to be of any special benefit to these cases. In some few instances the mild climate is conducive to out-door life and this is of course beneficial.

Bronchial troubles of other forms usually improve in this locality. The usual form of catarrh of the air passages in a dry form is generally benefited by the moist salt air. I can say the same of catarrhal conditions of other parts of the body, but there is a moist form where there is much expectoration that is more aggravated in this climate. Malarial and typhoid fevers are comparatively rare here. Nearly all the malaria we have here can be traced to some other locality and so far as I know the *Anopheles* mosquito has not been found in this immediate vicinity. The city is so well provided with sewers that typhoid seldom occurs and the cases are sporadic only.

We have made no efforts against tuberculosis except a public lecture and moving picture show.

There has been one inspection and examination made of the public schools for hookworm disease. It was moderately successful and while I am unable to give data will say that some seventy or eighty were treated and cured. The people at large seem wil-

ling to assist in this matter and a systematic work would be of benefit although this neighborhood is not badly infected.

About a year ago we had a mild epidemic of smallpox. There were 35 cases, all among the blacks, except the first cases reported. There were no deaths and only one of them was advised to remain in bed. A pest house was established and they were moved to it as soon as found. The people seemed very willing to aid the authorities. Credit for the work lies with Dr. L. H. Jones, since deceased.

Nothing has been done against mosquitoes nor for the prevention of typhoid, except in a general way, such as the filling of low lots and the disposal of sewage. In these matters the city is progressing very rapidly as she is growing so fast that the authorities try to be as progressive as in all other things.

The matter of garbage disposal has, until recently, been in the hands of the city. Now it is let out on contract, an arrangement not recommended by this office, as it is difficult to get a contractor to do the work as thoroughly as it should be done. At present the waste of the city is carried out two miles from the city, and is placed in large ditches. Here all inflammable matter is consumed and the rest buried.

The city is sewered almost to the city limits in all directions and the outlet is in Tampa Bay just below the city. It should be either further out or further away and there is some effort being made to have it changed. The old dry closet is fast being done away with.

The milk and water supplies are of the best, except that our dairies can hardly supply the demand during the season. The water supply is from artesian wells and stand pipe. Recent analyses prove it to be unusually pure and healthful, although a little hard. The dairies are all outside the city and are well conducted and supplied with good healthy stock.

As to the epidemic diseases, we have been very fortunate. There have been sporadic cases at times but no epidemic except that of smallpox as mentioned. We have a little epidemic of dengue about every three years but have had very little now since 1908. Hydrophobia is unknown here. The death report for last year gives whooping cough, 3; diphtheria, 1; measles, 1; typhoid fever, 3; malaria, 2; and lagrippe, 1.

We had one case of pellagra here two years ago but none since. Infantile paralysis is very rare here and so far as I know none has occurred in this locality.

The Health Office is preparing to make inspections of premises, and proper forms for use in this connection have been supplied. At present we have been compelled to confine ourselves to the complaints, but soon hope to be able to make voluntary inspections. Conditions seem to be very good or this would have been done long ago. Our greatest difficulty is the proper disposal of garbage as noted above.

There are no public health lectures except as given at times before the school committee and parents.

During the past year there has been no inspection of the schools, but in 1910 an inspection was made to locate hookworm sufferers, and some attention was given at the time to adenoids and eye and ear troubles. For some reason no inspection was made this past year. I presume the reason was that no authority was found for such. In justice to the teachers I must say that they have been very quick to refer afflicted pupils to the doctors and the doctors have been very good in looking after indigent cases.

Ordinances during the past year provide for the appointment of a Health Officer and a City Physician. At present one incumbent holds both offices, and I believe this plan will be the better one until the city is much larger than at present.

The newspapers of the city have given valuable aid in promoting the health of the city, but as yet there seems to be a great deal of pressure brought to bear against the publication of health statistics. I was asked this morning to cease the publication of the weekly death report and I had never in this included the report of communicable diseases which as you will see I send to the doctors weekly. I might say in passing that it is the intention in cases of *grave* contagion as in the past, to notify all the doctors *at once*.

There are no county organizations of physicians for health purposes, or others at present, but we hope to have one in the near future. There has been no distribution of literature for public health educational purposes.

# SOUTH JACKSONVILLE, FLA.

*D. B. Williams, M. D., President Board of Health*

I regret very much my inability to supply a report of health conditions in this community, of any great value. No records have been kept, or rather they are so incomplete as to be of no practical use. The City Council has adopted ordinances for the reporting of births and deaths, also contagious diseases, and the health department will look to the enforcement of these ordinances in the future. We hope to be able, therefore, to make a more complete report in 1912.

Our population is practically free from hookworm disease. There are no cases of tuberculosis here, so far as I know. Smallpox has been more or less prevalent in the surrounding territory, but only one case has been brought to my attention within the city limits. Vaccinations have been few.

We have had several cases of malarial fever. Every effort has been made to do away with the breeding places for mosquitoes. This, however, has not accomplished very much with the poor drainage facilities we have, but with the near completion of an up-to-date sewerage system, we expect to accomplish more.

There have not been more than six or eight cases of typhoid fever at most. We have ordinances requiring the screening of earth closets—one of the most prolific causes in the spread of typhoid fever; but the city authorities have refused to enforce this. However, with the completion of the sewerage system we will do away with most of the earth closets, and I hope to be able to enforce the screening requirements with the remainder. Sewage disposal at present is handled by scavenger cart. A great many residences have private cess pools.

Our water supply is from artesian wells, with natural pressure. There is practically no opportunity for contamination. The water passes into tanks or reservoirs. Our milk supply for the most part, is excellent.

We have been practically free from the communicable diseases. No diphtheria, no measles, one case of scarlet fever, and a few cases of whooping cough. No dengue, hydrophobia or pellagra. No anterior poliomyelitis has been brought to my attention.

Sanitary inspections are made at frequent intervals. Garbage is collected regularly and carted to secluded places or burned. We



have no medical inspection of schools. This matter was brought to the attention of the Mayor and the Council in the annual report of the health department, for 1911, but so far no action has been taken. The health department has the enthusiastic support of the principal and teachers in this matter and hopes to be able to report something more encouraging for 1912.

Public health literature has been distributed on a small scale, when supplied by the State Board of Health.

TAMPA, FLORIDA

*Sheldon Stringer, M. D., City Health Officer*

It will be impossible to comply with your request for a report of vital statistics, this year, due to the sickness of the secretary of our local Board of Health.

Speaking in a general way the births and deaths of our city are about in the same proportion as they were last year. The City of Tampa may be classed as one of excellent, healthy surroundings, being surrounded on one side with high pine hills, and on the other by the salty breezes from the Gulf of Mexico. The drainage being good and our sewerage system very fair, we do not often have many cases of communicable diseases; therefore, this explains our very low rate of mortality.

We had several cases of smallpox last year, but the small number which occurred was prevented from spreading on account of the wholesale vaccination done last year by the physicians of the city and county. There have been a very few cases of diphtheria in the city, one of the prime reasons for which is that we insist upon strict rules in regard to isolation of the patient and for further protection of the remaining members of the family, we use immunizing doses of diphtheria antitoxin.

The city of Tampa is always ready to co-operate with the state Board of Health and the efficient State Health Officer in the prevention of disease.

BIRTHS AND DEATHS REPORTED IN TAMPA, 1911

BIRTHS					
Month	White		Black		Totals
	Male	Female	Male	Female	
January -----	15	5	5	1	26
February -----	20	17	--	5	42
March -----	17	6	3	4	30
April -----	11	19	5	3	38
May -----	11	24	--	4	39
June -----	13	14	1	7	35
July -----	13	10	3	1	27
August -----	13	11	2	4	30
September -----	16	17	5	6	44
October -----	19	17	9	6	51
November -----	19	13	8	5	45
December -----	18	14	--	2	34
Totals -----	185	167	41	48	441

DEATHS					
Month	White		Black		Totals
	Male	Female	Male	Female	
January -----	25	13	7	14	59
February -----	26	29	8	10	73
March -----	31	27	10	15	83
April -----	26	21	9	10	66
May -----	28	29	10	11	78
June -----	20	21	10	14	65
July -----	28	20	14	13	75
August -----	28	11	15	11	65
September -----	24	18	15	16	73
October -----	10	7	7	8	32
November -----	16	13	4	13	46
December -----	21	14	14	4	53
Totals -----	283	223	123	139	7

## SMALLPOX REPORTED IN FLORIDA, 1911

County	January	February	March	April	May	June	July	August	September	October	November	December	Total
Alachua	27	7	26	25	12	9	--	5	--	--	2	1	144
Baker	1	--	--	--	--	--	--	--	--	--	--	--	1
Bradford	2	12	5	2	1	3	5	--	2	--	2	--	24
Brevard	--	--	--	2	--	2	--	--	--	--	--	--	9
Calhoun	10	55	7	7	--	--	--	--	--	--	--	--	79
Citrus	1	--	2	2	4	--	18	--	5	2	6	--	40
Clay	--	1	--	14	--	1	--	--	--	--	--	--	16
Columbia	--	2	--	--	1	1	1	--	--	1	5	26	37
Dade	*1	6	2	**2	--	--	--	--	--	--	1	--	12
DeSoto	--	--	1	17	7	10	2	--	--	--	--	--	37
Duval	29	46	53	98	111	34	31	23	18	15	14	17	489
Escambia	5	32	22	21	16	5	4	3	--	--	--	1	109
Franklin	4	--	6	7	1	6	--	--	--	--	--	--	24
Gadsden	32	24	3	--	36	20	29	20	3	2	--	3	172
Hamilton	--	2	1	1	2	--	--	--	--	--	--	--	6
Hernando	--	--	1	8	20	46	38	42	35	8	1	2	201
Hillsboro	30	50	29	14	15	1	7	3	1	--	--	1	151
Holmes	--	--	--	--	12	--	--	--	--	--	--	--	12
Jackson	33	34	51	60	55	31	18	20	24	20	23	26	400
Jefferson	--	4	2	--	2	5	5	10	4	--	--	--	32
Lafayette	6	--	1	--	--	--	--	--	--	--	--	--	7
Lake	10	1	9	10	5	5	1	--	--	--	6	--	47
Lee	6	8	7	--	--	--	--	--	--	--	--	--	21
Leon	28	43	93	39	12	24	--	--	--	--	1	--	240
Levy	--	2	1	2	1	--	2	--	--	--	--	--	8
Liberty	--	--	6	--	--	--	--	--	--	--	--	--	6
Madison	4	--	--	--	--	1	1	--	3	4	--	6	19
Manatee	--	--	2	11	--	8	2	--	--	--	--	--	23
Marion	5	--	1	2	37	5	1	--	3	2	3	1	60
Monroe	--	--	--	--	†3	--	--	--	--	--	--	--	3
Nassau	2	--	3	--	--	--	--	--	--	--	--	--	5
Orange	1	--	1	2	--	1	4	--	--	1	1	--	11
Osceola	--	--	2	--	--	--	--	--	--	--	--	--	2
Palm Beach	--	--	--	†1	2	--	--	--	--	--	--	2	5
Pasco	1	15	14	8	11	--	18	--	--	--	--	--	67
Polk	3	10	17	36	30	3	3	--	--	--	--	6	265
Putnam	--	1	7	--	8	22	--	--	--	4	3	--	45
Santa Rosa	1	33	4	7	2	6	--	--	--	--	--	1	54
St. Johns	1	4	††7	4	1	3	--	--	--	--	--	--	20
St. Lucie none	--	--	--	--	--	--	--	--	--	--	--	--	--
Sumter	--	--	--	--	1	--	--	19	--	6	--	3	29
Suwannee	2	--	--	5	--	--	--	--	--	--	--	--	7
Taylor	124	18	1	--	--	--	--	--	--	--	--	--	143
Volusia	††9	14	3	--	2	2	1	1	1	3	5	--	41
Wakulla	--	--	5	2	--	--	--	--	--	--	--	--	7
Walton	7	8	--	1	1	2	--	4	2	--	--	--	25
Washington	4	4	3	2	--	--	2	7	3	4	--	1	30
Totals	389	431	555	412	411	256	193	157	106	72	76	97	3,155

\*Original infection from Pittsburg, Pa., Nov. 1910.

\*\*One case from South Georgia.

†From Tampa and Pensacola.

††One case from Michigan.

‡Transferred to Dade County Isolation Hospital.

‡†One transferred to Duval County Isolation Hospital.

## STATE BOARD OF HEALTH OF FLORIDA

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## DEATHS FROM SMALLPOX, 1911

Alachua County	January	1	black female
Clay County	June	1	black male
Duval County	February	2	black males
Franklin County	March	1	black male
Franklin County	?	3	?
Hillsboro County	February	1	?
Jackson County	?	1	?
Lake County	May	1	black female
Leon County	January	3	black males
Leon County	February	1	black female
Leon County	April	2	black females
St. Johns County	April	1	?

Total . . . . . 18 deaths



## SMALLPOX REPORTED IN THE UNITED STATES, 1911

The figures herewith are taken from Public Health Reports, U. S. Public Health and Marine-Hospital Service, issues of June 30th and December 29th, 1911, giving reported cases for six-month periods; and additional cases reported for 1911, in the issues of 1912 up to March 1st, 1912, are included, except that in the case of Florida the figures are corrected for each month of the year. The following comment in the Public Health Report tabulation of smallpox, is pertinent: "In the following table (Smallpox in the United States) the states indicated by an asterisk are those from which reports of smallpox are received only from certain cities, and in some cases County Boards of Health. In these states, therefore, the recorded cases and deaths should not be taken as showing the general prevalence of the disease. In the states not marked by an asterisk the reports are received monthly from the State Board of Health, and include all cases reported to the state authorities.

## SMALLPOX REPORTED IN THE UNITED STATES, 1911

State	January to June		July to December		1911 Totals	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
†*Alabama	39	--	6	--	45	--
Arizona	--	--	9	2	9	2
Arkansas	4	--	--	--	4	--
California	102	4	111	6	213	10
Colorado	1,296	1	192	--	1,488	1
Connecticut	--	--	2	--	2	--
District of Columbia	23	--	5	--	28	--
Florida	2,454	18	701	--	3,155	18
††*Georgia	14	--	--	--	14	--
Illinois	811	4	304	--	1,115	4
Indiana	813	2	314	1	1,127	3
Iowa	617	5	277	--	894	5
Kansas	1,503	6	611	20	2,114	26
*Kentucky	42	--	18	--	60	--
*Louisiana	424	3	10	--	434	3
Maine	9	--	59	--	68	--
Maryland	27	--	4	--	31	--
Massachusetts	5	--	6	2	11	2
Michigan	610	6	178	--	788	6
Minnesota	722	2	560	1	1,282	3
Mississippi	1	--	--	--	1	--
†*Missouri	501	1	53	3	554	4
Montana	275	1	97	1	372	2
*Nebraska	113	--	207	--	320	--
New Hampshire	30	--	45	--	75	--
New Jersey	35	--	3	1	38	1
New York	79	--	262	3	341	3
North Carolina	2,978	--	490	--	3,468	--
North Dakota	93	--	71	--	164	--
Ohio	356	1	272	--	628	1
Oklahoma	1,145	2	86	--	1,231	2
Oregon	45	4	176	--	221	4
Pennsylvania	44	1	116	--	160	1
††*Rhode Island	1	--	274	--	275	--
*South Carolina	20	1	1	--	21	1
South Dakota	446	1	124	--	570	1
§*Tennessee	573	4	12	--	585	4
Texas	651	10	146	40	797	50
Utah	1,091	3	1,015	5	2,106	8
Vermont	--	--	323	--	323	--
Virginia	434	--	526	--	960	--
Washington	647	2	454	--	1,101	2
Wisconsin	322	--	280	--	602	--
Wyoming	--	--	104	--	104	--
Totals	19,395	82	8,504	85	27,899	167

†Alabama cases reported from Montgomery, Birmingham and Mobile Quarantine.

††Smallpox in Georgia reported from Macon only.

‡Missouri cases reported from Kansas City and St. Louis only.

††Smallpox in Rhode Island reported from Providence only.

§Smallpox in Tennessee reported from Knoxville only.

Delaware, Idaho, Nevada, New Mexico and West Virginia reported no cases.





## EXPENDITURES IN THE MANAGEMENT OF SMALLPOX, 1911

<b>Alachua County:</b> Number of cases -----	144		
Ordinary salaries chargeable -----		\$ 258.63	
Groceries furnished patients -----		11.40	
Drugs furnished patients -----		14.75	
Railway fares -----		29.95	
Living expenses, Assistant State Health Officers -----		121.45	
Livery and wagon hire -----		33.50	
Clothing furnished patients -----		2.85	
Incidentals -----		7.15	
Vaccine, 4130 points -----		268.45	\$ 748.13
<b>Baker County:</b> Number of cases -----	1		
Vaccine, 25 points -----		1.63	1.63
<b>Bradford County:</b> Number of cases -----	24		
Ordinary salaries chargeable -----		10.00	
Extraordinary salaries -----		172.70	
Groceries furnished patients -----		23.45	
Livery hire -----		36.00	
Railway fares -----		2.05	
Wood -----		1.00	
Drugs -----		.50	
Nurse -----		12.00	
Vaccine, 1990 points -----		129.35	387.05
<b>Brevard County:</b> Number of cases -----	9		
Vaccine used, 523 points -----		34.00	34.00
<b>Calhoun County:</b> Number of cases -----	79		
Ordinary salaries chargeable -----		38.85	
Feeding patients -----		20.65	
Livery hire -----		18.25	
Drugs furnished patients -----		20.80	
Living expenses Assistant State Health Officers -----		77.70	
Railway fares -----		12.91	
Incidentals -----		5.35	
Vaccine, 285 points -----		18.53	213.04
<b>Citrus County:</b> Number of cases -----	40		
Ordinary salaries chargeable -----		21.50	
Living expenses Assistant State Health Officers -----		4.15	
Railway fares -----		3.70	
Drugs furnished patients -----		.75	
Livery hire -----		.50	
Vaccine, 655 points -----		42.58	73.18
<b>Clay County:</b> Number of cases -----	16		
Ordinary salaries chargeable -----		39.38	
Groceries furnished patients -----		43.35	
Railway fares -----		7.80	
Nurse -----		34.50	
Vaccine, 377 points -----		24.51	149.54

<b>Columbia County:</b> Number of cases -----	37		
Ordinary salaries chargeable -----		165.00	
Extraordinary salaries -----		20.00	
Railway fares -----		15.25	
Livery hire -----		22.50	
Living expenses Assistant State Health Officer -----		74.15	
Vaccine, 1050 points -----		68.25	365.15
<b>Dade County:</b> Number of cases -----	12		
Ordinary salaries chargeable -----		233.00	
Extraordinary salaries -----		178.50	
Cook-nurse services -----		282.00	
Groceries furnished patients -----		290.70	
Maintenance Isolation Hospital -----		50.40	
Drugs and disinfectants -----		45.37	
Clothing furnished patients -----		10.50	
Vaccine, 150 points -----		9.75	1,100.22
<b>DeSoto County:</b> Number of cases -----	37		
Ordinary salaries chargeable -----		300.00	
Extraordinary salaries -----		88.00	
Living expenses Assistant State Health Officer -----		7.75	
Railway fares -----		15.65	
Groceries furnished patients -----		52.60	
Nurse services -----		67.00	
Drugs furnished patients -----		10.50	
Bedding furnished patients -----		7.25	
Cooking utensils -----		1.55	
Incidentals -----		2.00	
Vaccine, 845 points -----		54.93	607.23
<b>Duval County:</b> Number of cases -----	489		
Ordinary salaries chargeable -----		1,609.10	
Extraordinary salaries -----		505.50	
Feeding patients at Isolation Hospital -----		3,698.50	
Hospital furniture and fixtures -----		464.14	
Drugs and disinfectants -----		28.70	
Livery hire -----		170.75	
Expenses Ass't State Health Officers -----		70.25	
Railway fares -----		3.30	
Wood for hospital -----		75.00	
Hospital laundry -----		47.00	
Vaccine, 2029 points -----		131.89	6,804.13
<b>Escambia County:</b> Number of cases -----	109		
Ordinary salaries chargeable -----		616.00	
Extraordinary salaries -----		28.00	
Dray and livery service -----		66.24	
Railway fares -----		12.49	
Groceries furnished 27 hospital patients -----		55.26	
Hospital supplies -----		5.25	
Drugs furnished patients -----		22.15	
Hospital plumbing repairs -----		9.70	
Incidentals -----		19.00	
Vaccine, 750 points -----		48.75	882.84

Franklin County: Number of cases -----	24		
Ordinary salaries chargeable -----		66.60	
Extraordinary salaries -----		50.00	
Railway fares -----		6.75	
Living expenses Assistant State Health Officer -----		10.50	
Rents -----		15.00	
Drugs and disinfectants -----		19.00	
Vaccine, 960 points -----		62.40	230.25
Gadsden County: Number of cases -----	172		
Ordinary salaries chargeable -----		16.65	
Extraordinary salaries -----		751.15	
Livery hire -----		150.00	
Groceries furnished patients -----		32.95	
Drugs furnished patients -----		7.50	
Railway fares -----		9.15	
Living expenses Assistant State Health Officer -----		13.75	
Vaccine, 5053 points -----		328.44	1,309.59
Hamilton County: Number of cases -----	6		
Vaccine, 680 points -----		44.20	44.20
Hernando County: Number of cases -----	201		
Ordinary salaries chargeable -----		35.55	
Extraordinary salaries -----			
Livery Hire -----		74.25	
Railway fares -----		9.80	
Living expenses Assistant State Health Officer -----		12.10	
Vaccine, 60 points -----		3.90	135.60
Hillsboro County: Number of cases -----	151		
Ordinary salaries chargeable -----		807.55	
Extraordinary salaries -----		475.63	
Groceries furnished hospital patients -----		808.20	
Hospital furniture and fixtures -----		31.43	
Drugs furnished hospital patients -----		72.50	
Livery and wagon hire -----		354.50	
Installation water supply at Isolation Hospital -----		242.37	
Maintenance water supply system -----		19.39	
Living expenses Assistant State Health Officer -----		24.78	
Vaccine, 6,092 points -----		395.98	3,232.33
Holmes County: Number of cases -----	12		
Vaccine, 49 points -----		3.18	3.18
Jackson County: Number of cases -----	400		
Ordinary salaries chargeable -----		11.10	
Extraordinary salaries -----		1,047.00	
Groceries furnished patients -----		11.81	
Drugs furnished patients -----		11.00	
Livery and wagon hire -----		283.00	
Railway fares -----		19.13	
Rents -----		2.50	
Vaccine, 2,570 points -----		167.05	1,552.59

Jefferson County: Number of cases -----	32		
Ordinary salaries chargeable -----		20.00	
Railway and pullman fares -----		10.50	
Living expenses Assistant State Health Officer -----		9.50	
Drugs furnished patients -----		1.00	
Vaccine, 700 points -----		45.50	86.50
Lafayette County: Number of cases -----	7		
Ordinary salaries chargeable -----		23.00	
Railway fares -----		7.45	
Vaccine, 726 points -----		47.19	77.64
Lake County: Number of cases -----	47		
Extraordinary salaries -----		244.00	
Livery and wagon hire -----		40.50	
Drugs furnished patients -----		2.50	
Groceries furnished patients -----		1.05	
Railway fares -----		3.90	
Rent -----		4.00	
Vaccine, 1,250 points -----		81.25	377.20
Lee County: Number of cases -----	21		
Ordinary salaries chargeable -----		13.35	
Extraordinary salaries -----		320.00	
Drugs and disinfectants -----		27.95	
Livery hire -----		2.00	
Living expenses Assistant State Health Officer -----		4.75	
Railway fares -----		5.50	
Bedding for patients -----		9.00	
Feeding patients -----		155.00	
Nurse -----		54.00	
Incidentals -----		32.00	
Vaccine, 466 points -----		30.29	653.64
Leon County: Number of cases -----	240		
Ordinary salaries chargeable -----		1,392.71	
Extraordinary salaries -----		54.23	
Railway fares -----		14.65	
Livery hire -----		227.55	
Groceries furnished patients -----		118.10	
Living expenses Assistant State Health Officer -----		559.01	
Rents -----		12.50	
Wood -----		2.00	
Drugs furnished patients -----		97.30	
Bedding for patients -----		13.35	
Nurse -----		21.00	
Incidentals -----		16.40	
Vaccine, 4,150 points -----		269.75	2,798.55
Levy County: Number of cases -----	8		
Ordinary salaries chargeable -----		8.90	
Extraordinary salaries -----		15.00	
Vaccine, 470 points -----		30.55	54.45
Liberty County: Number of cases -----	6		
Ordinary salaries chargeable -----		38.85	
Vaccine, 540 points -----		35.10	73.95



Madison County: Number of cases -----	19		
Vaccine, 1,592 points -----		103.48	103.48
Manatee County: Number of cases -----	23		
Groceries furnished patients -----		16.35	
Services of nurse -----		28.50	
Railway fares -----		13.20	
Vaccine, 1,095 points -----		71.17	129.22
Marion County: Number of cases -----	60		
Ordinary salaries chargeable -----		26.10	
Railway fares -----		21.80	
Livery hire -----		1.25	
Living expenses Assistant State			
Health Officer -----		6.50	
Groceries furnished patients -----		7.00	
Vaccine, 2,829 points -----		183.88	246.53
Monroe County: Number of cases -----	3		
Vaccine, 1,115 points -----		72.47	72.47
Nassau County: Number of cases -----	5		
Drugs furnished patients -----		49.00	
Vaccine, 530 points -----		34.45	83.45
Orange County: Number of cases -----	11		
Extraordinary salaries -----		92.40	
Drugs furnished patients -----		11.50	
Bedding for patients -----		2.00	
Railway fares -----		1.00	
Incidentals -----		6.50	
Vaccine, 2,535 points -----		164.77	278.17
Osceola County: Number of cases -----	2		
Extraordinary salaries -----		4.45	
Livery hire -----		7.00	
Drugs furnished patients -----		18.20	
Vaccine, 50 points -----		3.25	32.90
Palm Beach County: Number of cases -----	5		
Vaccine, 266 points -----		17.29	17.29
Pasco County: Number of cases -----	67		
Ordinary salaries chargeable -----		33.70	
Living expenses Assistant State			
Health Officer -----		10.30	
Stenographic fees -----		3.25	
Railway fares -----		10.40	
Vaccine, 610 points -----		39.65	102.30
Livery hire -----		5.00	

Polk County: Number of cases -----	265		
Ordinary salaries chargeable -----		305.55	
Drugs furnished patients -----		3.20	
Groceries furnished patients -----		3.00	
Livery and wagon hire -----		71.00	
Living expenses Assistant State			
Health Officer -----		165.35	
Railway fares -----		40.85	
Maintenance Ft. Meade Isolation Hospital			
March 29th to May 1st, 34 patients:			
Drugs -----	\$ 6.10		
Furniture and fixtures -----	34.30		
Groceries -----	123.00		
Nurse -----	10.00	173.40	
Vaccine, 5,152 points -----		334.88	1,097.23
Putnam County: Number of cases -----	45		
Ordinary salaries chargeable -----		10.00	
Extraordinary salaries -----		21.50	
Railway fares -----		1.60	
Livery hire -----		1.50	
Living expenses Assistant State			
Health Officer -----		7.10	
Vaccine, 905 points -----		58.82	100.52
Santa Rosa County: Number of cases -----	54		
Extraordinary salaries -----		111.20	
Groceries furnished patients -----		8.30	
Drugs furnished patients -----		11.90	
Wood -----		2.00	
Railway and boat fares -----		12.00	
Livery hire -----		42.50	
Vaccine, 240 points -----		15.60	203.50
St. Johns County: Number of cases -----	20		
Extraordinary salaries -----		32.90	
Livery hire -----		5.75	
Groceries furnished patients -----		14.29	
Drugs furnished patients -----		14.10	
Bedding for patients -----		14.28	
Nurse hire -----		24.00	
Incidentals -----		2.50	
Vaccine, 375 points -----		24.38	132.20
St. Lucie County: Number of cases -----	none		
Vaccine, 10 points -----		.65	.65
Sumter County: Number of cases -----	29		
Ordinary salaries chargeable -----		11.10	
Railway fares -----		7.70	
Living expenses Assistant State			
Health Officer -----		4.00	
Vaccine, 180 points -----		11.70	34.50
Suwannee County: Number of cases -----	7		
Ordinary salaries chargeable -----		5.55	
Vaccine, 1,870 points -----		121.55	127.10

Taylor County: Number of cases -----	143		
Ordinary salaries chargeable -----	227.55		
Railway fares -----	19.45		
Feeding patients -----	34.85		
Drugs furnished patients -----	52.70		
Livery hire -----	42.10		
Living expenses Assistant State Health Officer -----	188.05		
Incidentals -----	3.15		
Vaccine, 1,285 points -----	83.53	651.38	
Volusia County: Number of cases -----	41		
Ordinary salaries chargeable -----	29.44		
Extraordinary salaries -----	60.90		
Railway fares -----	20.30		
Livery hire -----	3.00		
Living expenses Assistant State Health Officer -----	2.75		
Vaccine, 573 points -----	37.25	153.64	
Wakulla County: Number of cases -----	7		
Ordinary salaries chargeable -----	11.10		
Vaccine, 10 points -----	.65	11.75	
Walton County: Number of cases -----	25		
Living expenses Assistant State Health Officer -----	2.25		
Railway fares -----	21.10		
Drugs -----	.50		
Livery hire -----	2.00		
Vaccine, 230 points -----	14.95	40.80	
Washington County: Number of cases -----	30		
Ordinary salaries chargeable -----	27.75		
Extraordinary salaries -----	56.70		
Livery hire -----	39.00		
Drugs furnished patients -----	2.00		
Living expenses Assistant State Health Officer -----	6.75		
Railway and boat fares -----	10.00		
Incidentals -----	1.00		
Vaccine, 1,123 points -----	73.00	216.20	
*Total cost of vaccine used in 1911 -----	\$ 3,844.77		
Total expense of management exclusive of vaccine -----	21,986.32		
Total expenditures account smallpox -----	\$25,831.09		

\*During 1911 smallpox vaccine was used in every County in the State. Smallpox was reported from all the counties except St. Lucie.

## COUNTY AGENTS OF THE STATE BOARD OF HEALTH, MARCH 1, 1912.

County	Name of Agent	Address
Alachua	Dr. J. Harrison Hodges	Alachua
Baker	Dr. E. F. Brown	Macclenny
Bradford	Dr. Albert H. Freeman	Starke
Brevard & St. Lucie	Dr. W. E. VanLandingham	Fort Pierce
Calhoun	Dr. B. V. Elmore	Blountstown
Citrus	Dr. J. H. Chiles	Floral City
Clay	Dr. L. C. Fisher	Green Cove Springs
Columbia	Dr. Roy E. Chalker	Lake City
Dade	Dr. J. M. Jackson	Miami
DeSoto	Dr. R. L. Cline	Arcadia
Escambia	Dr. J. Harris Pierpont	Pensacola
Franklin	Dr. B. B. Blount	Carrabelle
	and Dr. F. F. Ferris	Apalachicola
Hamilton	Dr. R. Dean Tompkins	Jasper
Hernando	Dr. W. H. Cox	Brooksville
Hillsboro	Dr. Chas. Wm. Bartlett	Tampa
Holmes	Dr. John D. Gable	Bonifay
Jackson	Dr. Theophilus West	Marianna
	and Dr. P. B. Wilson	Sneads
Jefferson	Dr. J. R. McEachern	Monticello
Lafayette	Dr. C. A. O'Quinn	Mayo
Lake	Dr. W. D. Bush	Leesburg
	and Dr. W. P. McKee*	Eustis
Lee	Dr. A. P. Hunter	Fort Myers
Leon	Dr. F. Clifton Moor	Tallahassee
Levy	Dr. Joseph H. Coffee	Cedar Key
Madison	Dr. L. C. Ruter	Madison
Manatee	Dr. Joseph Halton	Sarasota
Marion	Dr. W. V. Newsom	Ocala
Nassau	Dr. D. G. Humphrey	Fernandina
Orange	Dr. P. P. Pillans	Orlando
Osceola	Dr. M. J. Hicks	Kissimmee
Palm Beach	Dr. Chas. M. Merrill	West Palm Beach
Pasco	Dr. W. E. Seay	Dade City
Pinellas	Dr. F. W. Wilcox	St. Petersburg
Polk	Dr. C. W. Love	Lakeland
Putnam	Dr. E. W. Warren	Palatka
Santa Rosa	Dr. H. Mason Smith	Milton
St. Lucie and Brevard	Dr. W. E. VanLandingham	Fort Pierce
Sumter	Dr. S. C. Wood	Webster
Suwannee	Dr. W. C. White	Live Oak
Volusia	Dr. John MacDiarmid	DeLand
	and Dr. Geo. Klock*	Daytona
Walton	Dr. C. B. McKinnon	DeFuniak Springs
Washington	Dr. F. C. Wilson	Chipley

\*Dr. McKee and Dr. Klock have accepted appointments as Agent of the Board in order that the Board might have a representative in their respective localities to sign permits for the transportation of the dead.



## HYDROPHOBIA

TREATMENT ADMINISTERED FOR ITS PREVENTION, BY THE STATE

BOARD OF HEALTH, DURING 1911

TABLE No. 1

Case No.	Sex	Age, Yrs.	Residence			Infection			Evidence of Infection				Treatment		Remarks
			Bite	Date	Location	Extent	Animal	Clinical	Microscopic	Administered at	Begun	Ended			
106	M	29	Jacksonville.	Yes Feb.	5 Hand	Slight	Dog	Rabies	Rabies	Jacksonville	Feb.	11 Feb.	Bitten by same animal		
107	M	32	Jacksonville.	Yes Feb.	9 Wrist & finger.	Slight	Dog	Rabies	Rabies	Jacksonville	Feb.	12 Mar.			
108	M	24	Jacksonville.	Yes Feb.	5 Hand	Slight	Dog	Rabies	Rabies	Jacksonville	Feb.	14 Mar.			
109	M	10	Jacksonville.	Yes Feb.	11 Arm	Slight	Dog	Rabies	Rabies	Jacksonville	Feb.	14 Mar.			
110	M	10	Live Oak	Yes Feb.	13 Wrist and leg.	Severe	Cat	Rabies	Rabies	Live Oak	Feb.	20 Mar.			
111	F	2	Jacksonville.	Yes Mar.	3 Nose and face.	Severe	Dog	Rabies	Rabies	Jacksonville	Mar.	7 Mar.	Bitten by same animal		
112	F	4	Jacksonville.	Yes Mar.	2 Nose and face.	Slight	Dog	Rabies	Rabies	Jacksonville	Mar.	7 Mar.			
113	M	38	Jacksonville.	Yes Mar.	2 Finger	Slight	Dog	Rabies	Rabies	Jacksonville	Mar.	7 Mar.			
114	F	35	McAlphin.	Yes Feb.	2 Forearm	Slight	Dog	Rabies	Rabies	Live Oak	Mar.	8 Mar.			
115	F	11	Wellborn.	Yes Mar.	4 Hand	Severe	Dog	Rabies	Rabies	Wellborn	Mar.	10 Apr.			
116	M	34	Spokane, Wash.	Yes Mar.	11 Leg	Slight	Dog	Rabies	Rabies	Jacksonville	Mar.	16 Apr.			
117	F	4	Jacksonville.	Yes Mar.	11 Forearm	Slight	Dog	Rabies	Rabies	Jacksonville	Mar.	15 Apr.			
118	M	4	Jacksonville.	Yes Mar.	11 Leg	Slight	Dog	Rabies	Rabies	Jacksonville	Mar.	15 Apr.			
119	M	21	Juniper.	Yes Mar.	5 Thumb	Slight	Dog	Rabies	Rabies	Greensboro	Mar.	17 Apr.			
120	M	20	Ratlift.	Yes Mar.	11 Leg	Slight	Dog	Rabies	Rabies	Jacksonville	Mar.	16 Apr.			
121	M	5	Jacksonville.	Yes Mar.	13 Leg and buttock	Slight	Dog	Rabies	Rabies	Jacksonville	Mar.	16 Apr.			
122	M	15	Wellborn.	Yes Mar.	16 Leg	Slight	Dog	Suspicious	Rabies	Wellborn	Mar.	17 Apr.			
123	M	44	Pt. Tampa City.	Yes Mar.	18 Leg	Slight	Dog	Rabies	Rabies	Jacksonville and Tampa.	Mar.	19 Apr.	Not possible to obtain brain of dog Brother of patient bitten same date, died Mar. 15 of hydrophobia		
124	M	5	Jacksonville.	Yes Feb.	15 Wrist	Slight	Dog	Rabies	**	Jacksonville	Mar.	20 Apr.			
125	M	38	Jacksonville.	Yes Feb.	15 Wrist	Slight	Dog	Rabies	**	Jacksonville	Mar.	20 Apr.	Father of case 124		
126	M	9	Jacksonville.	Yes Mar.	18 Heels, toe, finger	Severe	Monkey	Rabies	Rabies	Jacksonville	Mar.	22 Apr.	Monkey bitten 2 weeks prior by dog. Clinical manifestations commenced March 15.		

127	M	10	Wellborn.	Yes Mar.	19 Both wrists	Severe	Dog	Rabies	Rabies	Wellborn	Mar. 24	Apr. 8	
128	M	42	Wellborn.	Yes Mar.	19 Breast	Severe	Dog	Rabies	Rabies	Wellborn	Mar. 24	Apr. 8	
129	M	40	Wellborn.	Yes Mar.	16 Wrist	Slight	Monkey	Rabies	Rabies	Jacksonville	Mar. 25	Apr. 10	***
130	F	7	Outer Creek.	Yes Jan.	6 Leg	Severe	Dog	Rabies	Rabies	Outer Creek	Mar. 25	Apr. 10	***
131	F	7	Outer Creek.	Yes Jan.	6 Leg	Slight	Dog	Rabies	Rabies	Outer Creek	Mar. 25	Apr. 10	***
132	M	3	Outer Creek.	Yes Jan.	6 Forearms	Slight	Dog	Suspicious	Rabies	Outer Creek	Mar. 25	Apr. 11	Dog escaped
133	M	28	Jacksonville.	Yes Feb.	25 Leg	Slight	Dog	Rabies	Rabies	Jacksonville	Mar. 25	Apr. 11	+
134	M	32	Jacksonville.	Yes Mar.	23 Near left eye	Severe	Dog	Rabies	Rabies	Jacksonville	Mar. 25	Apr. 12	
135	M	10	Devon.	(Physician made no detailed report)	15 Hand	Slight	Dog	Rabies	Rabies	Dunnellon	Mar. 28	Apr. 13	
136	M	45	Live Oak.	Yes Mar.	23 Finger	Slight	Dog	Suspicious	Rabies	Live Oak	Mar. 29	Apr. 15	
137	M	3	Jacksonville.	Yes Mar.	31 Face	Severe	Dog	Rabies	Rabies	Jacksonville	Mar. 29	Apr. 15	
138	F	3	Jacksonville.	Yes Mar.	31 Head	Severe	Dog	Rabies	Rabies	Jacksonville	Mar. 29	Apr. 15	
139	F	20	Live Oak.	Yes Apr.	5 Neck and finger	Slight	Dog	Rabies	Rabies	Live Oak	Apr. 2	Apr. 23	
140	M	2	Live Oak.	Yes Apr.	5 Hand	Slight	Dog	Rabies	Rabies	Live Oak	Apr. 8	Apr. 28	
141	F	4	Live Oak.	Yes Apr.	6 Nose	Slight	Dog	Rabies	Rabies	Live Oak	Apr. 8	Apr. 25	
142	F	4	Jacksonville.	Yes Apr.	6 Hand, cuts & scratches	Slight	Dog	Suspicious	Rabies	Jacksonville	Apr. 12	May 2	
143	M	55	Jacksonville.	No	licked by			Rabies	Rabies	Jacksonville	Apr. 12	Apr. 29	++Bitten by same animal
144	F	29	Jacksonville.	No	Hand abrasions	Slight	Dog	Rabies	Rabies	Jacksonville	Apr. 13	Apr. 30	(a) Wife of case 134
145	M	23	Jacksonville.	Yes Apr.	17 Leg	Slight	Dog	Suspicious	Rabies	Jacksonville	Apr. 14	Apr. 21	Refused treatment after April 21.
146	F	3	Jacksonville.	Yes Apr.	15 Leg	Slight	Dog	Suspicious	Rabies	Jacksonville	Apr. 15	May 2	
147	M	5	Live Oak.	Yes Apr.	12 Arm	Slight	Dog	Suspicious	Rabies	Jacksonville	Apr. 15	May 2	
148	M	65	Middleburg.	Yes Apr.	14 Side & arm	Superficial	Dog	Suspicious	Rabies	Atlanta and Jacksonville	Apr. 17	May 6	(b)
149	M	56	Fernandina.	Yes Apr.	14 Hand	Severe	Dog	Suspicious	Rabies	Fernandina	Apr. 17	May 6	
150	M	15	Jacksonville.	(Physician made no report)	15 Wrist	Slight	Dog	Rabies	Rabies	Jacksonville	Apr. 21	May 7	
151	F	15	Jacksonville.	Yes Apr.	14 Hand	Severe	Dog	Rabies	Rabies	Jacksonville	Apr. 21	May 7	
152	F	26	Lakeland.	Yes Apr.	17 Wrist	Slight	Dog	Rabies	Rabies	Lakeland	Apr. 21	May 7	
153	F	17	Jacksonville.	Yes Apr.	26 Face	Slight	Dog	Rabies	Rabies	Jacksonville	Apr. 22	May 12	Dog escaped
154	M	23	Jacksonville.	Yes Apr.	26 Wrist	Slight	Dog	Rabies	Rabies	Jacksonville	Apr. 22	May 12	
155	M	40	Jacksonville.	Yes Apr.	4 Nose and eyelids	Slight	Dog	Rabies	Rabies	Jacksonville	Apr. 26	May 15	
156	F	2 1/2	Near Jacksonville.	Yes May	5 Finger	Slight	Dog	Rabies	Rabies	Jacksonville	May 7	May 20	
157	F	4	Near Jacksonville.	No	7 Finger	Slight	Dog	Suspicious	Rabies	Jacksonville	May 10	May 27	(c)
158	M	4	Near Jacksonville.	Yes May	16 Neck	Slight	Cat	Suspicious	Rabies	Jacksonville	May 10	May 27	
159	F	4	Jacksonville.	Yes May	13 Thumb	Slight	Dog	Rabies	Rabies	Jacksonville	May 14	June 8	(d)
160	F	31	Live Oak.	Yes May	13 Heel	Slight	Dog	Rabies	Rabies	Jacksonville	May 14	June 8	
161	M	13	Live Oak.	Yes May	14 Leg	Slight	Dog	Rabies	Rabies	Jacksonville	May 15	June 8	(e)
162	M	6	Live Oak.	Yes May	13 Hand	Slight	Dog	Rabies	Rabies	Jacksonville	May 15	June 8	Bitten by same animal
163	M	6	Live Oak.	Yes May	13 Leg	Slight	Dog	Rabies	Rabies	Jacksonville	May 15	June 8	
164	M	29	Live Oak.	Yes May	13 Finger	Slight	Dog	Rabies	Rabies	Live Oak	May 18	June 5	
165	F	29	Live Oak.	Yes May	13 Foot	Slight	Dog	Rabies	Rabies	Live Oak	May 18	June 5	
166	F	29	Jacksonville.	(Physician made no report)	22 Finger	Slight	Dog	Suspicious	Rabies	Jacksonville	May 18	June 5	Bitten by same animal
167	M	...	Jacksonville.	(Physician made no report)	22 Finger	Slight	Dog	Suspicious	Rabies	Jacksonville	May 18	June 5	
168	M	...	Jacksonville.	(Physician made no report)	22 Finger	Slight	Dog	Suspicious	Rabies	Jacksonville	May 18	June 5	
169	F	13	Jacksonville.	Yes	...	...	Dog	Suspicious	Rabies	Jacksonville	May 26	June 12	Bitten by same animal
170	...	3	Dunnellon.	(Physician made no detailed report)	...	...	Dog	Suspicious	Rabies	Dunnellon	June 4	...	Discontinued

## HYDROPHOBIA —(Continued).

Case No.	Sex	Age, Yrs.	Residence	Infection		Evidence of Infection			Treatment		Remarks		
				Date	Location	Extent	Animal	Clinical	Microscopic	Administered at		Begun	Ended
171	F	6	Jacksonville.	No June 24	Legs licked and scratched by		Dog			Tampa	July 9	Cancelled	
172	M	7	Tampa.	Yes July 5	Finger	Slight	Cat.			Jacksonville	July 10	Dog escaped	
173	M	11	Jacksonville.	Yes July 6	Leg and thumb	Slight	Dog	Suspicious		Jacksonville	July 12	Dog escaped	
174	F*	18	Jacksonville.	Yes July 7	Thumb	Severe	Dog	Suspicious		Jacksonville	July 14		
175	M*	69	Jacksonville.	Yes July 10	Finger	Slight	Dog			Jacksonville	July 30		
176	M	30	High Springs.	Yes	Hand (Physician made no detailed report)					High Springs	July 30		
177	M	30	Jacksonville.	Yes July 27	Arm	Slight	Cat.			Jacksonville	July 30		
178	M*	33	Live Oak.	Yes Aug. 6	Face	Physician made no detailed report				Live Oak	Aug. 12		
179	M	2	Jacksonville.	Yes Aug. 13	Arm	Physician made no detailed report				Jacksonville	Aug. 14		
180	M	2	Jacksonville.	Yes Aug. 13	Arm	Physician made no detailed report				Jacksonville	Aug. 17		
181	M	3	Jacksonville.	Yes Aug. 13	Finger	Physician made no detailed report				Jacksonville	Aug. 17		
182	M	3	Jacksonville.	Yes	Hand		Dog			Jacksonville	Aug. 17		
183	F	5	Jacksonville.	Yes	Thigh (Physician made no detailed report)					Jacksonville	Aug. 23	Same animal as No. 194	
184	F*	7	Jacksonville.	Yes Aug. 21	Face	Severe	Dog	Rabies.		Jacksonville	Aug. 23	Physicians made no de- tailed reports	
185	M*	10	Jacksonville.	Yes	Hand		Dog	Suspicious		Jacksonville	Aug. 27		
186	M*	10	Jacksonville.	Yes	Hand		Dog	Suspicious		Jacksonville	Aug. 27		
187	M	26	Jacksonville.	Yes	Thumb	Slight	Dog	Suspicious		Jacksonville	Aug. 27		
188	F	26	Jacksonville.	Yes	Thumb	Slight	Dog	Suspicious		Jacksonville	Aug. 27		
189	M	36	Bronson.	Yes Aug. 29	Arm	Slight	Dog	Rabies.		Ocala	Sept. 4		
190	M	22	Ocala.	Yes Aug. 27	Finger	Severe	Dog	Rabies.		Jacksonville	Sept. 13		
191	M*	42	Jacksonville.	Yes Sept. 7	Finger	Slight	Dog	Rabies.		Jacksonville	Sept. 13		
192	M*	42	Jacksonville.	Yes Sept. 7	Finger	Slight	Dog	Rabies.		Jacksonville	Sept. 13		
193	M	6	Jacksonville.	Yes Sept. 10	Leg	Slight	Dog	Rabies.		Jacksonville	Sept. 13		
194	M	4	Jacksonville.	Yes Sept. 10	Abdomen	Severe	Dog	Rabies.		Jacksonville	Sept. 13	Same animal as No. 184	
195	M	40	Cottendale.	Yes Sept. 7	Leg		Dog	Rabies.		Cottendale	Sept. 15	Physician made no de- tailed report	
196	M	18	Jacksonville.	Yes Sept. 8	Arm		Dog	Rabies.		Jacksonville	Sept. 15		
197	F*	2	Jacksonville.	Yes Sept. 17	Arm	Slight	Cat.			Jacksonville	Sept. 21		
198	M	26	Kingston.	Yes Sept. 26	Thumb		Dog	Rabies.		Daytona	Oct. 4	Physicians made no de- tailed reports	
199	M	11	Quincy.	Yes Oct. 1	Leg	Severe	Cat.			Quincy	Oct. 5		
200	F	30	Quincy.	Yes Oct. 1	Arm	Slight	Cat.			Quincy	Oct. 5		
201	F	30	Quincy.	Yes Oct. 1	Arm	Slight	Cat.			Quincy	Oct. 5		
202	M		Jacksonville.	Yes Oct. 2	Arm		Dog	Suspicious		Jacksonville	Oct. 7	Physician made no de- tailed report	
203	M		Jacksonville.	Yes Sept. 29	Hand		Dog			Jacksonville	Oct. 9	Physician made no de- tailed report.	
204	M	21	Tallahassee.	Yes Sept. 30						Tallahassee	Oct. 11		
205	F	14	Jacksonville.	Yes Nov. 6	Hands	Severe	Dog			Jacksonville	Oct. 26	Bitten by same animal	
206	M	9	Bronson.	Yes Nov. 6	Face		Dog			Bronson	Nov. 13	Bitten by same animal	
207	M	6	Bronson.	Yes Nov. 6	Arm		Dog			Bronson	Nov. 13	Bitten by same animal	
208	F	9	Macleenny.	Yes Nov. 13	Hand		Dog			Macleenny	Nov. 17	Bitten by same animal	
209	M*	12	Macleenny.	Yes Nov. 13	Wrist		Dog			Macleenny	Nov. 17	Treatment discontinued	
210	M	38	Mayo.	Yes Nov. 24	Arm	Penetrating	Dog			Mayo	Dec. 1	Treatment discontinued	
211	F	20	Jacksonville.	Yes Dec. 3	Thumb		Dog			Jacksonville	Dec. 8	Treatment discontinued	
212	F	4	Jacksonville.	Yes Dec. 3	Thumb		Dog			Jacksonville	Dec. 11	Bitten by same animal	
213	M	2	Jacksonville.	Yes Dec. 3	Hand	Slight	Dog			Jacksonville	Dec. 11	Bitten by same animal	
214	M	2	Jacksonville.	Yes Dec. 3	Hand	Slight	Dog			Jacksonville	Dec. 11	Treatment discontinued	
215	M	14	Jacksonville.	Yes Dec. 7	Leg	Slight	Dog			Jacksonville	Dec. 11	Treatment discontinued	
216	M	4	Jacksonville.	Yes Dec. 23	Finger	Slight	Dog			Jacksonville	Dec. 29	Bitten by same animal	
217	M	4	Jacksonville.	Yes Dec. 23	Finger	Slight	Dog			Jacksonville	Dec. 29	Bitten by same animal	
218	M	2	Jacksonville.	Yes Dec. 23	Hand		Dog			Jacksonville	Dec. 29	Treatment discontinued	
219	F	2	Jacksonville.	Yes Dec. 23	Hand		Dog			Jacksonville	Dec. 29	Treatment discontinued	
220	F	2	Jacksonville.	Yes Dec. 23	Hand		Cat.			Jacksonville	Dec. 29	Treatment discontinued	

\*Negro race.

\*\*On post mortem, Negri bodies were found in brain of boy who died from hydrophobia, who had been bitten by the same dog. See Rabies in a Human Being, with Post-mortem, by Henry Hanson, A.B., M.D., Jour. Amer. Med. Assn., Dec. 23, 1911, Vol. lvii, pp. 2064-2068.

\*\*\*Male, aged 83, bitten at same time by this animal, developed symptoms resembling hydrophobia on March 17, 1911, and died sixty hours afterward. 8 children bitten, 5 refusing treatment.

†Patient developed symptoms of hydrophobia supervening 18th dose (April 9th) and died April 11th.

††A mare bitten same date, died 20 days later; symptoms resembling hydrophobia.

(a) A cow bitten by this dog several weeks before, developed symptoms resembling hydrophobia, fought other cattle and was killed by them.

(b) On April 23rd patient refused further treatment and proceeded to Pasteur Institute at Atlanta.

(c) Cherokee Indian-Spanish patient.

(d) One of the bacteriological staff of the State Board of Health; finger cut with saw while working on brain of rabid dog.

(e) Parents insisted on treatment.



## HYDROPHOBIA

TREATMENT ADMINISTERED FOR ITS PREVENTION

TABLE No. 2

DISTRIBUTION BY COUNTIES AND TOWNS  
1911

County	Town	Month	No. of Cases	No. cases in each Co.
Alachua	High Springs	July	1	1
Baker	Macleenny	November	2	2
Clay	Middleburg	April	1	1
Duval	Jacksonville	February	7	
Duval	Jacksonville	March	16	
Duval	Jacksonville	April	7	
Duval	Jacksonville	May	7	
Duval	Jacksonville	June	1	
Duval	Jacksonville	July	4	
Duval	Jacksonville	August	10	
Duval	Jacksonville	September	8	
Duval	Jacksonville	October	2	
Duval	Jacksonville	December	10	
Duval	Near Jacksonville	May	3	75
Gadsden	Juniper	March	1	
Gadsden	Quincy	October	2	3
Hillsboro	Port Tampa City	March	1	
Hillsboro	Tampa	July	1	2
Jackson	Cottdondale	September	1	1
Lafayette	Mayo	November	1	1
Leon	Tallahassee	September	1	1
Levy	Otter Creek	January	3	
Levy	Bronson	August	1	
Levy	Bronson	November	2	
Levy	DeVon	March	1	7
Marion	Dunnellon	May	1	
Marion	Ocala	August	1	2
Nassau	Ratliff	March	1	
Nassau	Fernandina	April	1	2
Polk	Lakeland	April	1	1
Suwannee	Live Oak	February	3	
Suwannee	Live Oak	March	1	
Suwannee	Live Oak	April	3	
Suwannee	Live Oak	May	4	
Suwannee	Live Oak	August	1	
Suwannee	McAlpin	February	1	
Suwannee	Wellborn	March	4	15
Volusia	Kingston	September	1	1
15 Counties	23 towns	12 months		115 cases

## HYDROPHOBIA

TREATMENT ADMINISTERED FOR ITS PREVENTION

TABLE No. 3

DISTRIBUTION BY MONTHS AND COUNTIES  
1911

Month	County	No. of Cases	Totals for each Month
January	Levy	3	3
February	Duval	7	
February	Suwannee	2	9
March	Duval	16	
March	Gadsden	2	
March	Hillsboro	1	
March	Levy	1	
March	Nassau	1	
March	Suwannee	4	25
April	Clay	1	
April	Duval	7	
April	Nassau	1	
April	Polk	1	
April	Suwannee	3	13
May	Duval	10	
May	Marion	1	
May	Suwannee	4	15
June	Duval	1	1
July	Alachua	1	
July	Duval	4	
July	Hillsboro	1	6
August	Duval	10	
August	Levy	1	
August	Marion	1	
August	Suwannee	1	13
September	Duval	8	
September	Jackson	1	
September	Leon	1	
September	Suwannee	1	11
October	Duval	2	
October	Gadsden	2	4
November	Baker	2	
November	Lafayette	1	
November	Levy	2	5
December	Duval	10	10
	Total		115

TABLE No. 4  
NATURAL RABIES DEMONSTRATED IN LOWER ANIMALS  
FLORIDA—1911  
EXAMINATIONS MADE IN CENTRAL LABORATORY  
JACKSONVILLE

Month	Specimen County	Received from: Town	No. and kind of Animals
February	Bradford	Lake Butler	1 dog
February	Duval	Jacksonville	5 dogs
February	Leon	Tallahassee	1 dog
February	Suwannee	Live Oak	1 cat
March	Duval	Jacksonville	16 dogs
March	Marion	Dunnellon	1 dog
March	Nassau	Ratliff	1 dog
March	Suwannee	Live Oak	2 dogs
March	Suwannee	Wellborn	2 dogs
April	Duval	Jacksonville	9 dogs (a)
April	Duval	Jacksonville	1 monkey
April	Hernando	Centralia	1 dog
April	Suwannee	Wellborn	1 dog (b)
May	Duval	Jacksonville	2 dogs
May	Duval	Jacksonville	1 mule
May	Duval	Near Jacksonville	2 dogs
May	Levy	Bronson	1 dog
May	Suwannee	Live Oak	1 dog
June	Duval	Jacksonville	3 dogs
June	Hillsboro	Tampa	1 dog
July	Alachua	High Springs	1 dog
July	Duval	Jacksonville	3 dogs
July	Duval	Jacksonville	1 cat
July	Duval	Jacksonville	1 cat
July	Hillsboro	Tampa	9 dogs
August	Duval	Jacksonville	1 cat
August	Duval	Jacksonville	1 dog
August	Levy	Bronson	1 dog
August	Suwannee	Live Oak	1 dog
September	Duval	Jacksonville	7 dogs
September	Duval	Jacksonville	1 cat
September	Jackson	Cottontale	1 dog
September	Duval	Jacksonville	6 dogs
October	Gadsden	Quincy	1 cat
October	Duval	Jacksonville	2 dogs
November	Levy	Bronson	1 dog
December	Baker	Macleenny	1 dog
December	Duval	Jacksonville	6 dogs
December	Duval	Jacksonville	2 cats

No. of Specimens 99 (c)

(a) Examinations of two dogs doubtful, but animal inoculation demonstrated presence of Negri bodies.

(b) Examination of dog doubtful, but animal inoculation demonstrated presence of Negri bodies.

(c) By adding the examination made of the brain of patient dying from hydrophobia in March, (Negri bodies demonstrated), the number of specimens is made 100—as reported from the bacteriological laboratory.

SUMMARY OF TABLE No. 4

County	Town	No. and kind of Animals
Alachua	High Springs	1 dog
Baker	Macleenny	1 dog
Bradford	Lake Butler	1 dog
Duval	Jacksonville	68 dogs
Duval	Jacksonville	5 cats
Duval	Jacksonville	1 monkey
Duval	Jacksonville	1 mule
Duval	Near Jacksonville	2 dogs
Gadsden	Quincy	1 cat
Hernando	Centralia	1 dog
Hillsboro	Tampa	1 dog
Hillsboro	Tampa	1 cat
Jackson	Cottontale	1 dog
Leon	Tallahassee	1 dog
Levy	Bronson	3 dogs
Marion	Dunnellon	1 dog
Nassau	Ratliff	1 dog
Suwannee	Live Oak	4 dogs
Suwannee	Live Oak	1 cat
Suwannee	Wellborn	3 dogs

99 animals

Number of dogs	89
Number of cats	8
Number of mules	1
Number of monkeys	1

99

TYPHOID FEVER REPORTED TO THE STATE BOARD OF HEALTH  
DURING 1911

County	No. of Cases	No. of Deaths	Remarks
Franklin	5	--	
Gadsden	7	--	
Alachua	7	--	
Bradford	7	--	
Citrus	15	--	
Clay	3	--	Decrease over 1910
Columbia	1	--	
Dade	--	--	
DeSoto	10	--	Cases incorrect
Duval	98	--	
Escambia	45	33	
Hamilton	--	--	Slight increase over 1910
Hernando	6	--	
Hillsboro	246	16	
Holmes	--	--	
Jackson	--	--	Occasional cases



Jefferson	1	--	Decrease over 1910
Lake	6	--	
Lee	5	--	
Leon	19	1	
Levy	3	--	
Madison	4	--	
Manatee	2	--	
Marion	10	--	
Nassau	3	--	
Orange	8	7	Cases incomplete
Osceola	30	1	
Palm Beach	10	--	
Polk	9	--	
Putnam	6	6	Small epidemic
Santa Rosa	12	--	
St. John	10	--	
Sumter	6	3	
Suwannee	3	--	
Volusia	12	--	
Walton	1	--	
Washington	--	--	A few mild cases
Totals	610	67	

## MEASLES REPORTED TO THE STATE BOARD OF HEALTH DURING 1911

County	No. of Cases	No. of Deaths	Remarks
Alachua	--	--	Few cases
Bradford	--	--	Epidemic early part of 1911 with several deaths
Citrus	20	--	
DeSoto	8	--	These cases at Punta Gorda
Duval	366	9	These cases at Jacksonville
Escambia	--	4	Cases unascertainable
Hillsboro	--	1	Occasional cases
Holmes	--	--	Epidemic
Jackson	--	--	Large number of cases
Lake	--	--	Few cases in June and July
Marion	38	--	
Orange	--	1	Occasional cases
Putnam	--	--	Few cases in the spring
Santa Rosa	--	--	Epidemic
Volusia	--	--	Few cases
Washington	--	--	Epidemic in December
Total deaths	--	16	

## SCARLET FEVER REPORTED TO THE STATE BOARD OF HEALTH DURING 1911

County	No. of Cases	No. of Deaths	Remarks
Alachua	--	--	
Bradford	1	--	Few Cases
Dade	--	--	
DeSoto	3	--	Few Cases

Duval	205	4	Punta Gorda cases
Escambia	18	--	
Hillsboro	4	--	
Jackson	1	--	
Lake	--	--	Few cases
Leon	--	--	Few cases
Marion	8	--	
Putnam	2	--	
St. Johns	8	--	
St. Lucie	1	--	
Volusia	3	--	

## DIPHTHERIA REPORTED TO THE STATE BOARD OF HEALTH DURING 1911

County	No. of Cases	No. of Deaths	Remarks
Alachua	2	--	
Bradford	1	--	
Brevard	1	--	
Dade	1	1	Occasional cases
DeSoto	6	1	
Duval	52	6	
Escambia	13	1	
Franklin	1	--	
Hernando	1	--	
Hillsboro	68	1	
Jackson	1	--	
Jefferson	4	--	
Leon	10	--	
Manatee	1	--	
Marion	32	--	
Nassau	2	--	
Orange	3	3	Occasional cases
Osceola	1	--	
Palm Beach	8	2	
Polk	2	--	
Santa Rosa	3	--	
St. Johns	2	--	
Suwannee	1	--	
Taylor	1	--	
Volusia	3	--	
Walton	2	--	
Totals	222	15	

**APPENDIX.**



REPORT OF FINDINGS IN INVESTIGATION OF AL-  
LEGED UNSANITARY CONDITION OF DADE  
COUNTY ISOLATION HOSPITAL OF THE  
STATE BOARD OF HEALTH.

BY  
DR. HIRAM BYRD,  
*Assistant State Health Officer*

(Letter of Transmittal)

JACKSONVILLE, FLA., March 28, 1911.

*Dr. Joseph Y. Porter, State Health Officer, Key West, Fla.*

DEAR DOCTOR: Pursuant to instructions I have executed the detail to Miami to inquire into the conditions existing at the Dade County Isolation Hospital of the State Board of Health, leading to and culminating in the presentment of the Grand Jury at the spring term of court for Dade County, 1911, and have the honor to submit herewith my report.

Your attention is invited to the fact that in this inquiry a stenographic report was made of all interviews introduced into the testimony, and that practically every statement in the report was made by the various witnesses, and that I have only assembled them in logical sequence.

The report consists essentially of three parts. First, The complete papers, such as clippings from the *Miami Daily Metropolis*, list of Grand Jurors, stenographic reports of the various interviews, bill for groceries, etc.; all of which are included under that portion of the report known as "Exhibits" and numbered from 1 to 19.

Second, This part of the report consists of brief abstracts of the different exhibits and is arranged to precede the exhibits themselves.

Third, The third part of the report consists of parallel discussions, the left hand column being in a general way the charges and the right hand column the comments by the various witnesses. This part, although compiled last, is arranged to precede the other two parts.

Respectfully submitted,  
HIRAM BYRD,  
*Assistant State Health Officer*

## CORRESPONDENCE RELATIVE TO THE INVESTIGATION

## TELEGRAM

KEY WEST, FLA., March 21, 1911.

*State Board of Health of Florida, Jacksonville, Fla.*

Will not leave this week. Continue mail here. Detail Byrd to Miami. Investigate charges Grand Jury criminal mismanagement hospital. Do this carefully and impartially. Get statements from Jackson, editor *Metropolis*, Grand Jurymen and everyone who will speak. Ascertain whether any malice or prejudice influenced this presentment.

(Signed) JOSEPH Y. PORTER,  
State Health Officer.

## LETTER OF INSTRUCTIONS

EXECUTIVE OFFICE,  
STATE BOARD OF HEALTH OF FLORIDA,  
KEY WEST, FLA., March 21, 1911.

*Dr. Hiram Byrd, Assistant State Health Officer, Miami, Fla.*

DEAR DOCTOR: I have just detailed you by wire for special inspection service at Miami, and will send these specific instructions—more fully than I can or could wire them—by to-night's mail to Miami. I also enclose you a report of Dr. J. M. Jackson, Jr., the Board's special representative at Miami and for Dade County, which has attached a clipping from the *Miami Metropolis* of March 14th, attacking the management of the isolation hospital, operated by the Board at Miami, and purporting to quote from a presentment by a late Grand Jury of the Circuit Court of Dade County which severely criticizes the condition of the hospital and those who, it is claimed, are responsible for said state of affairs.

A criticism by a Grand Jury demands consideration, and you will therefore endeavor to obtain the facts and truths in the case, both in regard to the unsanitary state of the hospital and its grounds and the neglect of the patients therein. You will, therefore, as has been wired, go very fully into this investigation, endeavoring to ascertain if possible who or from what source the presentment was prompted and whether the present caretaker of the hospital is a fit man to be left in charge of the building and the patients.

Remain at Miami sufficiently long to obtain all possible information in regard to these charges and make your report of findings. Your report should analyze the situation in all of its aspects, with recommendations which would prevent further occurrences of this nature, because I propose that the citizens of Dade County and of Miami shall hear both sides of this question and to know the attitude of the Board toward any mismanagement, but at the same time if these charges are groundless and have been made through malice and prejudice, it is due Dr. Jackson and the other physicians of Miami who have assisted him from time to time in caring for smallpox patients, that he be given an opportunity to take such steps in protecting himself as will set him right before the community in which he and his medical associates live.

Very truly,  
(Signed) JOSEPH Y. PORTER,  
State Health Officer.

REPORT FROM THE DADE COUNTY AGENT OF THE BOARD TO THE  
STATE HEALTH OFFICER

MIAMI, FLA., March 14, 1911.

*Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.*

DEAR SIR: I beg to enclose herewith clippings from the *Miami Metropolis*, one being the report in full of the Grand Jury and the other an editorial in to-night's paper.

I admit conditions are not what I would like, but we cannot help sewers bursting, neither can we get plumbers to fix same at a time when there are patients there.

The whole matter seems to be the result of one Gulick who was carried there last fall when I was away on my vacation. So far as conditions are concerned, they are the same as when Dr. Byrd was here last November and December, only the sewer may have leaked a little more water from continued use.

Mr. Gause, the keeper, is not the cleanest man in the world, but I appointed him at the solicitation of the Camp of Confederate Veterans here and have overlooked as much as I could on account of his being a Confederate soldier, till now this comes.

Mrs. Gulick was in to see me this afternoon and as good as



told me she intended to bring suit, but this is only a repetition of what I told you the night Dr. Byrd was here, only then it was by the boy.

The matter has taken such a shape that I wish you would have it fully investigated, sending some one here to do so, as I do not want any of my shortcomings to reflect on you or the Board, but I wish to add I knew nothing of this investigation and was asked for no information. This will place the matter before you and I trust that you will have this investigation at as early a date as possible.

Very respectfully,  
(Signed) JAMES M. JACKSON, JR.

#### PART I OF REPORT OF DR. BYRD

##### ABSTRACTS OF EXHIBITS

###### *Grand Jury's Presentment:*

"We have visited the Pest House and made as thorough examination as possible without entering the building, which we could not do, as there were five patients in the house with smallpox."

(This visit was Mar. 11, 1911.)

###### *Statements of Drs. Mullett and Dr. Jaudon:*

(Drs. Mullett, Jaudon and Jackson visited the hospital together on Mar. 17, 1911.)

###### *Dr. Mullett:*

Q. When did you visit the Pest House?

A. On Friday, Mar. 17, 1911.

Q. Was anybody cleaning up at that time?

A. No. It had not been touched since the Grand Jury was out there. (See Exhibit No. 11.)

"We find the sanitary arrangements in a terrible condition."

###### *Dr. Mullett:*

Q. Did you go through the building?

A. Yes.

Q. Did you notice any odors in the toilets in the building?

A. Perfectly clean. Flushed out all right. (See Exhibit No. 11.)

"The drainage pipe leading from the toilets and kitchen to the cess pool is in such shape that all the refuse backs up and is deposited

###### *Dr. Jaudon's statement:*

"It is impossible for any sewage to back up under the house, as it (the ground) is higher under the house than

under the different parts of the building,

anywhere else." (See Exhibit No. 13.)

###### *Dr. Mullett:*

"About the water that runs under the house: it seems to be the kitchen water thrown out of the window, but was not running under the house; did not go two feet under; did not back up under the house at all; could not do it in fact, because it (the ground) was higher under the house. Did not come from drain pipe." (See Exhibit No. 11.)

###### *Dr. Jackson:*

"While the yard may have presented an untidy appearance, it has never at any of my visits shown an unsanitary condition further than the small puddle of water which was produced by throwing dish-water from the kitchen window, and would have been corrected at an earlier date but for the fact that there were smallpox patients in the house and I did not think the urgency of the situation demanded the exposure of a plumber to a possible infection while the cases existed there." (See Exhibit No. 16.)

###### *Dr. Jaudon:*

Q. Did you look for flies?

A. I did.

Q. Comparatively speaking, has the average restaurant in Miami more or less flies than the pest house?

A. I did not see any flies there while I see thousands of them in the restaurants." (See Exhibit No. 13.)

###### *Dr. Mullett:*

Q. Would you say there were fewer or more (flies) than you would find in the ordinary restaurant in town?

A. There are millions in the restaurants to where there are none out there. (See Exhibit No. 11.)

"We found discarded clothing of the patients lying all around the yard, also the discarded bedding."

###### *Mr. Gause:*

Questioned about this, Mr. Gause said: "The bedding was burned up. I put a sheet out to ask Dr. Jackson about, that had been greased from sleeping in and I showed it to him and he said burn it up—all stuff like that."

Q. Was that when the Committee was here?

A. Yes sir, I had it on a stump to ask Dr. Jackson about it and he said to burn it up." (See Exhibit No. 10.)

*Dr. Jackson:*

"At the time of the equipment of the hospital there were 23 beds with blankets, linen, bed linen, night shirts, table ware and linen supplies. Since the equipment of the hospital there have been very few cases and consequently there has never been any addition made to this equipment . . . There has never been a sufficient amount of patients there so that all the original bed linen had to be used . . . It is the custom when patients are at the hospital to use the linen from the supply on hand, and when removed from the bed, to have it thoroughly sunned for disinfection, then stored away until after all cases are dismissed, when some immune person is employed to wash up all linen." (See Exhibit No. 16.)

"We questioned Mr. Gauze, the man in charge, and secured the following information as to how the affairs of the institution are conducted.

"He is in charge without any help whatever, being nurse, cook and everything else, at a salary of \$15.00 per month and boards himself."

*Dr. Jackson:*

"He is paid \$15.00 per month to look after and care for the house and when there have been any smallpox cases he has been employed to take care of them at a salary of \$2.00 per day. Smallpox cases usually being so mild that it requires practically no care, only the preparation of the food and some simple assistance." (See Exhibit No. 16.)

*Mr. Gauze:*

When asked it it was not understood that he board himself out of the groceries furnished at the expense of the State Board of Health, while in charge of patients, Gauze answered that it was. (See Exhibit No. 10.)

"He is unable to get any help so that he can get any laundry work done at the Pest House and in fact none is ever done."

*Mr. Gauze:*

Q. They (the Grand Jury) stated that you are unable to get any help, and could not get any laundry done?

A. There was an old woman came out here about four years ago and did some washing after we had a case of smallpox.

Q. Have you had any smallpox since then?

A. Not till November 14th of last year.

Q. Do you use the same bed linen

from year to year without its being washed?

A. Never have used the same bedding that has been used without its being washed.

Q. Do you have a reserve supply of linen on hand that has never been used?

A. Yes, I do. Some sheets and pillow cases that have never been used. (See Exhibits No. 10 and No. 11.)

*Emma Lennox:*

(Who had been cleaning up at the hospital on the day of this interview.)

Q. Did you find any linen out there that had not been used, such as sheets, pillow slips, etc?

A. Yes, sir, I saw them.

Q. Could you tell me about how many sheets you found that had never been used?

A. I could not say. I just saw them but do not know how many. (See Exhibit No. 9.)

"We believe Mr. Gauze to be doing all in his power with the limited means he is furnished with, to care for the patients, but we wish to censure whoever is in control of the County Pest House for the unsanitary conditions existing there,

*Dr. Mullett:*

"As I said, I have seen neater housekeepers than the man out there but have seen much dirtier places than that in town. Can take you to dozens of them on Ave. D., not very far from here." (Exhibit No. 11.)

and for the *criminal neglect* (italics ours) of the unfortunate people who are obliged to be taken there and we recommend that the place be put in a sanitary condition at once.

Signed: J. W. HORNER,  
Foreman.  
R. D. MAXWELL,  
Clerk.

It is not certain just what is meant by the phrase "criminal neglect," but it is assumed, in this inquiry, that it has reference to medical treatment, the character and preparation of the food, bedding, etc., set forth in the charges made by Mr. Gulick and his mother who were the only witnesses appearing before the Grand Jury in this connection.

From the evidence in hand it would seem that young Gulick was satisfied while he was out there.

Dr. Jaudon, when asked if Gulick ever complained to him about the food or anything else out there replied:

"Not once. He said as soon as he was well he was going to take his gun



and go back out there. He enjoyed being there. In one of the photographs I took of him he was smoking a cigarette and he told me not to put that one in, as he did not want his mother to know he was smoking cigarettes. He never said once that he was dissatisfied with anything at the pest house. He seemed perfectly satisfied." (Exhibit No. 13.)

*Mr. Gause:*

"Henry Gulick, when he was here was a good boy and after he got well we commenced to have a water melon patch and he got a job of fishing but said he would like to stay here with me." (Exhibit No. 10.)

The complaint seems to have been an afterthought and possibly had some connection with the bill of the attending physician, Dr. Jaudon, which seems to have been a sore spot.

*Mr. Gulick:*

One question here Mr. Gulick wanted to ask (at the time of the interview) which was too late for the Grand Jury to do anything about, was about the doctor bill.

He had received a bill from Dr. Jaudon; Dr. Jaudon had told him there would be no expense at all and then turned around and sent them a bill for \$16.00. At this juncture he repeated that Dr. Jaudon had come four or five times, and at one time it was ten days between visits. It was explained to Mr. Gulick that Dr. Jaudon was his private physician, that under the laws of Florida the State Board of Health is given the right to isolate a patient with an infectious disease but that the patient selects his own physician and that the Board has no right to thrust treatment upon one in confinement.

He had paid no attention to the bill he said. "He was not sick enough to need treatment any way; that he had treated himself."

A generous interpretation of the testimony of Mr. Gulick would indicate that his memory is a little at fault which kept his story from being as coherent as it might otherwise have been. For instance:

*Mr. Gulick:*

Stated that he had been to see Dr. Jackson about the knives and forks, telling him they were rusty and not fit for any one to use, and that he did not want them brought in to him. (Exhibit No. 8.)

NOTE.—It will be remembered Dr. Jackson was away during Mr. Gulick's confinement in the hospital, returning on Friday before Mr. Gulick got out Saturday.

For full stenographic report of Mr. Gulick's statement see Exhibit No. 8.

For full stenographic report of Mrs. Gulick's statement, as far as she would make statement, see Exhibit No. 15.

(No attempt is made to analyze these statements for it is preferred to let them stand as their own best comment.)

From the evidence in hand it would not seem that Mr. Gulick suffered from lack of medical attention.

*Dr. Jaudon:*

Asked how many times he visited the pest house while Gulick was there, the doctor produced his books and showed dates as follows:

Nov. 14, 16, 18, 23, 26, 27, 29 and Dec. 3rd. (It will be remembered the patient in question was confined there from Nov. 14th to December 3rd. On the last date the doctor brought him back in his automobile.) Exhibit No. 13.)

Nor does it appear that patients ordinarily suffer from lack of medical attention.

*Dr. Jackson:*

"During the time when patients are in the hospital it is the custom to visit the institution on an average of two to three days unless it is during the period the patient is convalescent. (Exhibit No. 16.)

Nor does it appear that patients suffer from lack of variety or quantity of food.

*Dr. Jackson:*

Q. Is there any reason why patients should have cause of complaint of the quantity or quality of food furnished?

A. Not unless Mr. Gause is too lazy to get it, because he has carte blanche order to do so. (Exhibit No. 16.)

NOTE.—This is verified by Mr. Wharton. (Exhibit No. 17.)

And by Mr. Wharton's bill. (Exhibit No. 18.)

Nor does it appear that at any time there has not been a supply of clean bed linen on hand.

See Statement of Mr. Gause, (Ex. No. 10.) Emma Lennox. (Exhibit No. 9.) and Dr. Jackson, (Exhibit No. 16), and Terebas Maycock (Exhibit No. 19.)

From all of which it would seem that the Grand Jury has allowed itself to be imposed upon by a too superficial inquiry into the merits and demerits of the case in question. Its information, it will be recalled, rested upon the statements of Mr. Gulick and his mother in the Grand Jury room, and the statements of Mr. Gause at the hospital, and what the committee saw without entering the house. At the time its presentment was formulated, it did not even know who the physician in charge was.

It developed, however, in the course of the inquiry that Mr. Gause is totally lacking in point of personal cleanliness.

Mr. Gause is the caretaker of the hospital who bears an unsavory reputation from lack of personal cleanliness. I was told by a banker that Gause had been in his private office and that the odor was so pronounced that it had to be aired out after his departure. I was told by a member of the Grand Jury Committee that visited the pest house, that one of the other members kept away from Gause on their official visit, saying that he was more afraid of him than of his patients. Was told by one of the old veterans that Gause had a chronic sore leg, dating from a wound received in the Civil War, and that that accounts in part for the unsavory odor. It was said by one of the by-standers that Gause had not taken a bath in years, but it was afterward learned that this was an error; that some time in last December, under the benign influence of a patient, he had come into town quite clean and that it had occasioned much comment. (Exhibit No. 10.)

*Terebas Maycock:*

When asked about Mr. Gause, he stated that he is careless with himself, and then careless about preparing food and things like that. He would bring the food to you when he was not in a condition himself fit to bring it. He could keep himself a little cleaner than he does and a little more decent. Since

I have been out there I have never seen him wash his hands and I have been there 18 days. He has a sore leg which smells pretty bad. I have seen him handle that sore and then go into the kitchen and fix food without washing his hands. Have also seen the rag drop off it. That old woman out there told him about it. Every time you got close to him you could smell it. (Exhibit No. 19.)

This, however, seems to have escaped the notice, or at any rate, the censure, of the Grand Jury:

*Grand Jury's Presentment:*

"We believe Mr. Gause to be doing all in his power with the limited means he is furnished with to care for the patients."

From a careful and impartial analysis of the situation, based upon statements of all available persons who had any first-hand information concerning the institution and its management, the conclusion is reached that the only real fault to be found with the management of the institution is based upon the manifest lack of personal cleanliness of the attendant, and that whatever censure is due the management is due for retaining Mr. Gause in charge; that while he may be a suitable person to have the position of caretaker while no patients are there, he is not a suitable attendant to have the care of the sick.

#### ABSTRACTS OF EXHIBITS

##### Exhibit No. 1

Clipping from the Miami Daily Metropolis March 13th, 1911, containing the presentments of the Grand Jury, in which certain comment is made upon the condition and management of the Dade County Isolation Hospital of the State Board of Health.

##### Exhibit No. 2

Clipping from the Miami Daily Metropolis of March 14th, 1911, being an editorial comment upon the presentment of the Grand Jury concerning the said hospital.

##### Exhibit No. 3

Transcript of the presentment of the Grand Jury concerning the said hospital, taken from the original document.



**Exhibit No. 4**

An open letter from Dr. R. H. Huddleston published in the Miami Metropolis of March 15th, which is self explanatory.

**Exhibit No. 5**

List of the Grand Jurors at the spring term of the Circuit Court for Dade County, March, 1911, also list of committeemen appointed to inspect the Isolation Hospital.

**Exhibit No. 6**

Analysis of the Grand Jury's presentment concerning the Isolation Hospital.

**Exhibit No. 7**

Statement of Mr. C. G. Pratt, one of the Grand Jurymen, and a member of the committee, from which it appears:

- 1st. That at the time the committee visited the hospital they did not know who the physician was in charge.
- 2nd. That at the time the presentment was formulated the Grand Jury did not know who the physician in charge was.
- 3rd. That so far as he knew the only complaint from lack of food came from Mrs. Gulick and her son.
- 4th. That the patients in the hospital at the time had sufficient to eat and no complaints to make.

**Exhibit No. 8**

Statement of Mr. Gulick, the young man who, with his mother, were the only witnesses that appeared before the Grand Jury, from which it appears that his complaints were:

- 1st. The manner in which the food was prepared.
- 2nd. The uncleanness of the place.
- 3rd. That Dr. Jaudon neglected to attend him regularly.
- 4th. That Dr. Jaudon presented a bill.
- 5th. That he was not very sick and treated himself.

**Exhibit No. 9**

Statement of Emma Lennox, colored, who was at one time a patient out there, and then a cook, and afterwards attended her grandchildren while there, and at the time of interview was engaged in cleaning up. From which it appears:

- 1st. That bedding was dirty.
- 2nd. That there was clean unused linen.

3rd. That Dr. Jackson had engaged her at his own expense to look after the grandchildren while they were out there with smallpox.

**Exhibit No. 10**

Statement of Mr. H. H. Gause, the attendant at the hospital, from which it appears:

- 1st. That he did give the committee of the Grand Jury the impression that \$15 a month is all he gets under any circumstance.
- 2nd. That groceries have been supplied to the hospital upon his order at the expense of the State Board of Health, and that there is no apparent reason why patients should ever be fed on scrap meats or any unwholesome food.
- 3rd. That Henry Gulick was satisfied when he was there as a patient, and considered going back and staying out there.
- 4th. That articles of bedding and clothes mentioned by the Grand Jury committee were there as stated, but waiting for Dr. Jackson's permission to burn them.
- 5th. That after each case or group of cases of smallpox at the hospital Dr. Jackson had had everything cleaned up.

**Exhibit No. 11**

Statement of Dr. J. H. F. Mullett, who visited the hospital in company with Dr. Jackson and Dr. Jaudon, March 17th, 1911, six days after the committee of the Grand Jury had visited the hospital, from which it appears:

- 1st. That there was no evidence that slops had or could stand under the house.
- 2nd. That flies were far less abundant there than in the average restaurant in Miami.
- 3rd. That there are dozens of dirtier places in Miami than at the hospital.
- 4th. That no cleaning had been done between the time that the committee had visited the place and his visit.

**Exhibit No. 12**

Statement of Dr. S. M. Frazier, colored, in which it is shown that no complaint has been filed with him or come to his notice from the patients that he has sent to the hospital.

**Exhibit No. 13**

Statement of Dr. J. F. Jaudon, who was the attending physician of Mr. Gulick, and of Mr. Humphries while in the hospital, from which it appears:

- 1st. That young Gulick was not very sick.
- 2nd. That he was treated as a private patient and charged as such.

- 3rd. That the boy was quite satisfied while at the hospital.
- 4th. That the flies at the hospital were fewer than at the restaurants in Miami.
- 5th. That it is impossible for sewage to back up under the house, and
- 6th. That during 19 days that Mr. Gulick was confined in the hospital, he had made eight professional calls.

**Exhibit No. 14**

Statement of Dr. R. H. Huddleston, from which it appears that he first diagnosed the case of Mr. Gulick as ivy poison, that he afterwards changed the diagnosis to chicken pox, and that he still adheres to that diagnosis, and explains the fact that he did not get smallpox while out there shut up with smallpox, by assuming that the other case out there was not smallpox, and that the postscript in his letter to the Metropolis, known in this connection as Exhibit No. 4, was based upon statements of Mr. Humphrey, and not Mr. Gulick.

**Exhibit No. 15**

Statement of Mrs. Gulick, apparently made with reluctance and afterwards regretted, from which it appears that her complaints were of a second-hand nature, based upon information furnished by her son, and that she is not ready to state yet what action she will take in the premises.

**Exhibit No. 16**

Statement of Dr. James M. Jackson, Jr., agent of the State Board of Health for Dade County, and in charge of the hospital in question, from which it appears that the attendant, Mr. Gause, receives a salary of \$15 a month as caretaker, when there are no patients at the hospital, and \$2.00 a day for services when there are patients there.

That in addition to this he has as much ground as he wants to use for gardening and the use of all the water the wind mill will supply for irrigation purposes.

That he has carte blanche in the purchase of groceries, so there is no apparent reason why groceries of inferior quality should be used, or insufficient quantity.

That there is a reserve supply of linen on hand to be used while smallpox patients are there, and laid aside until the house is free from patients, when it is all washed.

That the hospital is arranged to keep the negro and white patients separate. That when there are patients in the hospital, it is his custom to visit them every two or three days, unless it is during the period of convalescence. That days on which he does not visit them, he is informed by note of their condition and wants, based upon their own statements.

That after convalescence is established, smallpox cases, especially mild ones, need little or no medical attention.

That during the disease the skin is kept anointed for the comfort of the patient, and in some measure to prevent pitting.

That this anointing the patient with grease makes bedding used by the patient, even for a short while, look extremely filthy. That bed linen when soiled and infected is spread out in the sunshine to be dried and disinfected by the sun, before being stowed away awaiting laundering, the sun being a most efficient disinfectant.

That the feet of the patients, anointed with grease, frequently walking in the yard and then in the house, causes the floor to become quite dirty in a short while.

That after each case or group of cases the smallpox hospital, linen and everything on the premises is disinfected in such a manner as to be as free from smallpox infection as any house in the county.

**Exhibit No. 17**

Statement of Mr. F. H. Wharton, who has been furnishing groceries to the hospital upon the order of Mr. Gause from which it appears that during the time that patients have been in the hospital Gause has bought groceries, of such kinds and in such quantities as he saw fit, without limitation.

**Exhibit No. 18**

Bill of groceries rendered by Magnolia Grocery Co. (Mr. Wharton) which is self explanatory.

**THE EXHIBITS IN DETAIL****Exhibit No. 1**

GRAND JURY CONDEMNES PAYMENT OF \$1500 MILE FOR ROAD BUILDING—REGARDS AMOUNT AS BEING EXCESSIVE FOR SUCH WORK—CONDITIONS AT PEST HOUSE ARE CALLED TO ATTENTION OF AUTHORITIES—BODY GOES INTO AFFAIRS OF THE COUNTY AND CITY WITH THOROUGHNESS RARELY CHARACTERISTIC OF SUCH ORGANIZATIONS—CIVIC PRIDE SHOULD BE ENCOURAGED IN SCHOOLS.  
(Miami Daily Metropolis.)

Late Saturday afternoon the grand jury empaneled Tuesday to bring in their findings for the spring term of the circuit court, made their presentment, which in a number of features approaches the sensational.

They found many conditions in the county execrable and have not hesitated to say so in the report which is given below.

*To the Honorable Minor S. Jones, Judge of the Seventh Circuit Court:*

We, the grand jury, in addition to special indictments already presented to the court, now beg leave to make this our general presentment, touching such matters and things as we deem necessary for the general good.

We have carefully considered all the criminal matters brought to our notice and have found indictments in all according to the grades of the several offenses, as presented by the testimony of the witnesses, who have appeared before us.



*Schools Committee*

We have visited most of the schools of the county and find the general condition of the property somewhat run down for lack of proper care.

Nearly every building visited needed painting and in nearly every instance the outhouses were in bad and unsanitary condition.

We recommend that the county school board and the trustees pay more particular attention to the condition of the property especially the sanitary condition. We find that sanitary conditions are very lax in nearly every instance and for the general health we recommend that suitable containers be supplied each school for lime to be used in the outhouses.

We suggest to the various school trustees and to the teachers, who have charge of the school properties that to improve the appearance of the schools and to instill in the pupils a feeling of civic pride, that they make the school grounds as attractive as possible by the judicious planting of trees and shrubbery and by so doing not only add to the attractiveness of the grounds, but also enhance the value of the property in their charge.

*Roads, Bridges and Convicts*

We have inspected a number of roads and bridges and find them in fair condition, with the exception that the continued drouth and heavy traffic have caused some very bad holes, which the county commissioners should have repaired at once.

We also find one piece of new road south from Black Joint Creek in very bad condition, caused by not being properly graded.

We are informed that this road was let by contract and no limit put on the excess of rock used, and that the cost of this road was about \$1,500 per mile, which we think is entirely too much for service rendered.

We cannot help but notice the congested condition of certain streets in the city of Miami caused mainly by the pedestrians having to walk in the streets for want of sidewalks, and suggest that the city officials remedy this condition soon as possible.

We find the convict camp in good sanitary condition and prisoners fairly well taken care of, with the exception of being supplied with shoes.

They are worked about twelve hours per day, which we think is too much.

We further recommend that the system of leasing convicts be abolished.

We further recommend that a watchman or automatic gate be placed at the various railroad crossings in the City of Miami.

*Public Offices*

We have visited the various public offices and examined the books and find them well kept with the exception of the county clerk's office which is too small and inadequate for the needs of this office.

We find the recording of public documents to be delayed on account of lack of room for sufficient clerical force.

We recommend that the attention of the county attorney be called to the collection of delinquent licenses.

*Court House and Jail*

We have examined the county jail and find the door leading into the cells from the main entrance should be repaired with locks that would prevent any possibility of prisoners escaping. The present locks, in our judgment, are entirely inadequate to prevent a jail delivery.

We find the flooring on the second floor in a very dilapidated condition especially the iron plates, which are badly rusted in places, absolutely useless and should receive immediate attention.

We find the sewer pipes on the second floor to have been installed without sufficient fall resulting in a very unsanitary condition.

We recommend a boiler plate wainscoting to be placed around the first floor as a matter of precaution against the escape of prisoners.

We find the woodwork greatly in need of painting.

We recommend that new bedding be placed in each and every cell.

We recommend that cells and floors and woodwork be scrubbed and cleaned regularly and kept in a sanitary condition whether occupied or not.

We recommend that the fence around the jail be re-braced and re-painted.

We also recommend the removal of the garbage pile, outside the jail, deeming it unsightly and unsanitary.

We also recommend that a padded cell be placed in the jail.

*Court House*

We recommend that a wing be built on the west side of the court house for the county judge's office.

We recommend that the clerk's office be enlarged as the present room is too small for the increasing business.

We recommend that the sheriff's office be enlarged. In fact the needs of all the county officials have grown beyond their facilities, afforded by the court house and it seems imperative that additional space be provided at once.

We recommend that the court house be painted and all necessary repairs made.

We have visited the Miami city jail and find conditions very good. We find some complaint in reference to laxity of medical attention. When requested and recommended to the custodian of the jail, that all due attention be given the prisoner's request for such service.

*Finances*

We attach hereto a report showing the balance to the credit of the

several funds with statement of clerk of the board as to the financial standing of the county, January 1, 1911.

To this is attached a statement as secured by us from the treasurer's books.

#### *Pest House*

We have visited the pest house and made as thorough examination as possible without entering the building, which we could not do, as there are five patients in the house with smallpox.

We find the sanitary arrangements in a terrible condition. The drainage pipe leading from the toilets and kitchen to the cesspool is in such a shape that all the refuse backs up and is deposited under different parts of the building causing a bad odor and attracting swarms of flies and other insects.

We found diseased clothing of the patients lying all around the yard, also the discarded bedding.

We questioned Mr. Goss, the man in charge and secured the following information as to how the affairs of the institution are conducted.

He is in charge without any help whatever, being nurse, cook and everything else at a salary of \$15 per month and boards himself.

He is unable to get any help so that he can get any laundry work done at the pest house and in fact none is ever done.

We believe Mr. Goss to be doing all in his power with the limited means he is furnished with to care for the patients, but we wish to censure whoever is in control of the county pest house for the unsanitary conditions existing there and for the criminal neglect of the unfortunate people who are obliged to be taken there, and we recommend that the place be put in a sanitary condition at once.

We wish to extend our thanks to the honorable judge of the circuit court, Minor S. Jones, for the courtesies extended to the grand jury. Also to the state's attorney, Jno. C. Jones, for his tireless efforts in assisting us.

We also wish to thank the several county officials for their courtesies and for the general information furnished this body.

Respectfully submitted,  
J. W. HORNER, Foreman.  
R. D. MAXWELL, Clerk.

#### **Exhibit No. 2**

#### **THE CONDITION OF THE PEST HOUSE.** (Editorial from Miami Metropolis, March 14th, 1911.)

The presentment made by the recent Grand Jury contains many things that should have the earnest attention of every citizen, but none of these is of greater importance than the condition of the pest house, which is supposed to be in charge of competent and trustworthy physicians of this city.

The Metropolis finds the following comment in the presentment, which he will not elaborate nor embellish. It speaks for itself. The presentment says:

"We have visited the pest house and made as thorough examination as possible without entering the building, which we could not do, as there are five patients in the house with smallpox.

"We find the sanitary arrangements in a terrible condition. The drainage pipe leading from the toilets and kitchen to the cess-pool is in such a shape that all the refuse backs up and is deposited under different parts of the building causing a bad odor and attracting swarms of flies and other insects.

"We found diseased clothing of the patients lying all around the yard, also the discarded bedding.

"We questioned Mr. Goss, the man in charge and secured the following information as to how the affairs of the institution are conducted.

"He is in charge without any help whatever, being nurse, cook and everything else at a salary of \$15 per month and boards himself.

"He is unable to get any help so that he can get any laundry work done at the pest house and in fact none is ever done.

"We believe Mr. Goss to be doing all in his power with the limited means he is furnished with to care for the patients, but we wish to censure whoever is in control of the county pest house for the unsanitary conditions existing there and for the criminal neglect of the unfortunate people who are obliged to be taken there, and we recommend that the place be put in a sanitary condition at once."

It is eminently proper that the Grand Jury should refer to the patients who are taken to the pest house as "unfortunate" individuals. They are indeed unfortunate. They are doubly unfortunate. They are unfortunate because of the necessity of being taken to the pest house, and they are unfortunate because they are taken there. The pest house is in charge of certain physicians in Miami, as we understand it, and they are, of course, vaccinationists. The Metropolis has held against all vaccine advocates that smallpox is a disease of filth; that it is born of filth and that it exists in filth. The condition of the pest house as seen by the Grand Jury (and not by The Metropolis) is a filthy, loathsome place. It is in charge of certain reputable physicians in Miami, who are also pro-vaccination. The Grand Jury says (not The Metropolis) that no washing is done in the place, that the filthy, disease infected garments of the patients are permitted to lie about the hospital, giving off their germs with every breath of air; that the drainage pipes are so clogged from pure carelessness and neglect that the drainage of the vile place is insufficient and that the streams of vitiated water are permitted to back up and form in puddles and pools under the pest house and round about it.

One person, who receives the miserable stipend of \$15 a month, (and boards himself) does the part of nurse and cook, interne, and everything else. He might as well be the surgeon in charge and father confessor to the unfortunate souls committed to this disreputable place, which is



in charge, we are informed, of certain reputable physicians in the city of Miami, who believe in vaccination and preach the virtues of it.

The Metropolis does not care to emphasize the condition of things at the pest house. It merely wishes to direct the attention of the public to the report of the Grand Jury in regard to conditions there.

### Exhibit No. 3

#### PEST HOUSE

We have visited the pest house and made as thorough examination as possible without entering the building, which we could not do as there was five patients in the house with smallpox.

We find the sanitary arrangements in a terrible condition. The drainage pipe leading from the toilets and kitchen to the cess pool is in such a shape that all the refuse backs up and is deposited under different parts of the building, causing a bad odor and attracting swarms of flies and other insects.

We found discarded clothing of the patients lying all around the yard, also the discarded bedding.

We questioned Mr Goss, the man in charge and secured the following information as to how the affairs of the institution are conducted.

He is in charge without any help, whatever, being nurse, cook, and everything else at a salary of \$15.00 per month and boards himself.

He is unable to get any help so that he can get any laundry work done at the pest house, and in fact none is ever done.

We believe Mr. Goss to be doing all in his power with the limited means he is furnished with, to care for the patients, but we wish to censure whoever is in control of the county pest house, for unsanitary conditions existing there, and for the criminal neglect of the unfortunate people who are obliged to be taken there, and we recommend that the place be put in a sanitary condition at once.

(Signed) J. W. HORNER, Foreman.  
R. D. MAXWELL, Clerk,

### Exhibit No. 4

DR. HUDDLESTON HAS A WORD ABOUT THE DADE CO. PEST HOLE—RELATES AN INCIDENT IN HIS OWN PRACTICE WHICH DOES NOT SAY MUCH FOR THE SKILL OF SOME PHYSICIANS WHO SEEM TO HAVE CHARGE OF THE PLACE.

(From the Miami Metropolis, March 15, 1911.)

Miami, Fla., March 15, 1911.

Editor Metropolis:

Having carefully read the presentment of our grand jury, and more especially that part of it relating to that noble(?) institution called the pest house, (with ye editors' comments upon the same) I deem it an opportune moment to make my own statement especially after being criti-

cised and even censured by one of the members of the grand jury for not doing so before that body.

As far back as Monday morning, Nov. 14th, '10, a young man named Gulick presented himself at my office for treatment for an eruption of the skin, confined mostly to the hands, wrists, face and neck; and having somewhat the appearance of rhus, or poison-vine eruption, and after telling me that he had been rambling through the woods I felt justified in calling it rhus poisoning. However, after prescribing for his constipation and a torpid liver with an astringent wash for the eruption I dismissed him with the request that he call again in a day or two, as I was not quite satisfied as to the nature of the breaking out. Mind you this young man had suffered from no other symptoms excepting a slight headache, naturally the result of an inactive liver and constipation. He agreed to call again and I thought no more of the case until the next morning when I was called upon by a couple of our town doctors and was greeted with the astounding information that I had let a case of smallpox slip through my fingers, and that he had since that time been roaming the streets at large and that there was no telling what amount of mischief he would have done in the community had they not caught him and put him in the pen.

Strange as it may seem I did not get excited over this statement, but later in the day I visited this so-called pest house in company with another doctor and found this same young man lounging about the room with a fairly well developed case of chickenpox.

The thermometer showed no fever while other symptoms were negative. Asked about his appetite he remarked that the only trouble about that was to get enough to eat, and it was afterwards ascertained that the scraps from the Miami Clubhouse was sometimes inadequate to satisfy the cravings of hunger of the inmates of this institution, it being one of the many bi-products of Dr. J. Y. Porter's money-making propositions.

However, after calling to my companion (who out of respect to the yellow flag that was waving a warning to all intruders, had remained outside) to come in, which he did, and after a careful examination of the young man, verified the diagnosis of chicken pox, we retraced our steps into town. After which I repaired to the office of the doctor who had this young man in charge, and informed him of my visit stating that instead of smallpox as he supposed that I had found a case of chicken pox. He became somewhat agitated at this and proposed that we see an expert on smallpox and let him decide the matter, notwithstanding the fact that the expert had not seen the case. However, as there was another doctor in the neighborhood who had, he was likewise admitted to the council. But the only agreement arrived at was that we visit the pest house on the following morning in a body and decide this momentous question.

But before the hour to start had arrived I was informed that the visit to the institution was all off, and that a mandate from the State Health Officer actually forbid any one—even a doctor—from visiting the institution where a case of smallpox was incarcerated. In the absence of the State

Health Officer's Agent here this doctor was in charge of the institution and I did not question him as to when he had received this information.

But not being satisfied with the rapid change in affairs which would leave a cloud of uncertainty hanging over my diagnosis I fortunately found a reputable physician who himself had had the smallpox, and who willingly consented to visit this institution with me.

But lo! on our arrival we were met in the neighborhood of the yellow flag with the imperative mandate in the form of two letters (both of which according to this young man's statement afterward must have made quicker time to that pest house than any of the doctors had made in their previous visits) forbidding our further advance. Thus we were cut off from all further communication with the case.

As to why I was thus treated does not appear quite clear as after investigation seems to negative the fact that an order from the State Board of Health was ever promulgated excluding physicians from pest houses, therefore the doctor must have been mistaken.

I have two reasons for making this statement: First of all for the sake of humanity, as I do not believe in even pest houses where unfortunates may be humanely treated and properly cared for. But when a poor unfortunate creature is taken from his bed at the hour of midnight because he happens to have a questionable eruption or breaking out of the skin that has proved absolutely harmless he not having missed a meals victuals in three weeks and only one meal from the dining room in that time sitting at the table with over forty boarders and otherwise mingling with them in a social way three times a day without harm to any one and put into an unsightly conveyance under his earnest protest, declaring that he never felt in better health than then, and conveyed through the pine woods by an inexperienced driver who did not know the way, got lost in the woods and did not reach their destination until three o'clock in the morning (four hours—on an otherwise three mile journey) cold, tired, and above all hungry, with not a crumb of anything in the larder to satisfy their craving desire for food, (nor was this hunger appeased until seven o'clock that night after the donkey and cart had arrived from the Miami Club house with its usual supply of left over food) and confined in this bastille of pestilence and disease breeding germs forty days and forty nights, then I think it quite time to draw the line and send up a howl of protest and indignation from the throat of every civilized creature in the land.

My second reason for this letter is to inform all those interested in the welfare and health of the community that it is their duty to see to it that each physician in the community have equal rights with his fellow physician (all other things being equal) in looking after health conditions of the community.

Respectfully, R. H. Huddleston.

P. S.—The latter part of this letter rests on the statement of the unfortunate one who was incarcerated against his will in this pest hole and if any of the doctors interested wish to reply in self defense or otherwise, I've no doubt but the pages of our daily papers will be open to them.

R. H. H.

## Exhibit No. 5

## Names of Grand Jurymen

A. A. Thomas.	H. V. Bennett.
Thomas Savage.	C. G. Pratt.
R. A. Coachman.	J. W. Horner, Foreman.
R. E. McDonald.	P. S. Heslington.
W. J. Rodgers	T. L. Sands.
T. A. Price	R. D. Maxwell, Clerk.
W. H. Hefferman.	T. E. Peacock.
H. M. Hart.	J. D. Dill.
F. M. Spencer.	J. B. Wofford.

## Names of Committee that "visited" Pest House

H. M. Hart.	J. D. Dill.
T. L. Sands.	Phillip H. Heslington.
	C. G. Pratt.

## Exhibit No. 6

## Analysis of the Grand Jury's Presentment Concerning Hospital

In a broadly general way, the presentment of the Grand Jury concerning the hospital in question, consists of two portions:

(a) A censure which is directed at "whoever is in control," and contains two counts:

The first is concerning the unsanitary condition of the premises of which several specific instances are cited, and the second, is for "criminal neglect" of the patients.

(b) A recommendation that the place be put in a sanitary condition at once.

It would appear that the Grand Jury based its actions upon the following:

First. Information filed by Mrs. Gulick and her son, who were the only witnesses that went before the Grand Jury in this case.

Second. Upon what the committee saw when it visited the Isolation Hospital.

Third. Upon the information furnished by Mr. Gause, who was interrogated by the committee at the time of their visit.

## Exhibit No. 7

## Statement of Mr. T. G. Pratt

(Mr. Pratt was Grand Jurymen, and a member of the committee that visited the pest house).



Asked if the committee was aware at the time they visited the pest house that Dr. Jackson was the physician in charge, answered they were not.

Asked if they knew it at the time the presentment was formulated, said they did not. That they knew it was one of the physicians but were not sure which.

Asked if Mr. Gause gave them to understand that he did not get but \$15 per month under any circumstances, said that he did.

Asked if he explained that he got more than that when smallpox cases were out there, Mr. Pratt said he did not—that he did not mention that at all. He said that they criticized Gause for the unclean condition of the place, but he said he did not have any help.

Asked if Gause mentioned the fact that it was a difficult matter to get washing done, and that in consequence they have a reserve supply of linen, that is used right along until it is used up, so that washing is only done at long intervals, he replied that Gause did not explain that. On the contrary, he gave the impression that there was no laundry work ever done, said there was no way to get it done. Also stated that it was almost impossible to get any help from the fact that nobody liked to go around smallpox or yellow fever cases. Mr. Pratt said he might add also, that they questioned the patients who came to the window ("we called them to the window so as to justify ourselves in not going into the house") as to whether they got enough to eat, and if they had any complaint to make and they stated that they did not. All that they knew was what Mrs. Gulick and her son had said. They knew nothing of the condition of the inside of the house, because they did not go in. They censured the unclean condition of the yard.

Asked if the only complaint from the lack of food was from Mrs. Gulick and her son, he answered that so far as they knew it was.

Asked who the other members of the committee were, Mr. Pratt said, Phillip H. Heslington, T. L. Sands, H. M. Hart and J. D. Dill.

#### Exhibit No. 8

##### Statement of Mr. Gulick

(Mr. Gulick was the patient who, with his mother, appeared before the Grand Jury. They are from Pittsburg, spending the winter in Miami. He is engaged as a deck hand on the Palms.)

Asked if he got enough to eat while out there, he answered "well there was plenty of stuff to eat, that was not it. We only objected to some things. There was plenty of what they sent us, but I could not eat what there was. When they first started in there was not enough, but I asked for more and they gave it to me."

Asked what the chief complaint was, Mr. Gulick said, "the chief complaint was the way the food was served. I could not eat it, as it was filthy and dirty, and the place was dirty."

"The two points of complaint, then, were the way the food was

served and the uncleanliness of the place?" "Yes, sir, and the little things that go with it; the sheets and bedding not fit for anybody."

Q. Was it true that some of the linen was taken from one of the negro beds for you? A. No, I cannot say that, where he got them, I do not know. I do not think they were taken from the negro beds. The other two men, though, were put in negro beds while I was there.

Q. Did you have occasion to think that any of the food was sent from the club house here in town? A. Yes, sir, I know that for a fact. They picked out what meat they wanted out of the scraps that were thrown out. I saw that. I did not eat any of it. They used that for food. They got scraps at the club house and the meat market.

Q. Were these scraps brought out to fertilize the banana trees? A. Yes, Mr. Gause would bring them and just before he took them out to the banana trees he would sort it over and take out what he wanted.

Q. Do you know this to be a fact? A. Yes, sir. I saw it taken out, cooked and served. There was only once he bought some meat. It was given to him, the cook said, we have some good meat to-day. I asked him how he knew it and he said it was given to Mr. Gause in the meat market. Every day he brought scraps out, he looked over it and got what he wanted. I would not touch it.

Q. Did Mr. Gause and the Captain (an old captain who stays out there with Mr. Gause most of the time and who is referred to in the above paragraph as the cook) eat of this meat themselves? A. Yes, sir, but it was dirty and filthy and should not have been allowed to be there.

Q. Were you very sick any time you were out there, Mr. Gulick? A. I cannot say that I was very sick from the disease, the meals made me sick.

Q. Did you spend any time in bed after your arrival there on account of the disease? A. Yes, on account of my sores.

Q. How much time did you spend in bed after your arrival on account of your sores? A. Only a few days, I guess about eight days.

Q. Dr. Jaudon attended you while you were there? A. What times he came out he did. He told mother he was there every day, but I think it was only four times. One time ten days went by and I did not see anybody.

Q. Dr. Huddleston was the man you went to after you got sick? A. Yes, sir.

Q. What was Dr. Huddleston's diagnosis? A. Poison ivy, or something of that nature. I thought the doctor did not know much about it and went over to Dr. Jaudon.

Q. Did Dr. Huddleston afterwards tell you that it was chicken pox? A. Yes, sir.

Q. Have you ever been vaccinated? A. Yes, sir.

Q. May I see your vaccination scars? (He exhibited his arm showing two scars.)

Mr. Gulick stated that he had been to see Dr. Jackson about the knives and forks, telling him that they were rusty and not fit for anyone

to use, and that he did not want them brought in to him. Dr. Jackson stated that he sent in June or July last the best plated silver, two dozen of each, to the pest house, and that they must have been stolen. I told him that I did not think that Mr. Gause would take them, but there were no signs of them there.

Asked if he went before the Grand Jury on his own volition or if he was summoned, he did not remember, he was just asked to go with his mother, whether she was called or not he did not know.

One question he wanted to ask which was too late for the Grand Jury to do anything about, was about the doctor's bill. He had received a bill from Dr. Jaudon. Dr. Jaudon had told him that there would be no expense at all, and then turned around and sent them a bill for \$16. At this juncture he repeated that Dr. Jaudon had come four or five times, and that one time it was ten days between visits.

It was explained to Mr. Gulick that Dr. Jaudon was his private physician, that under the laws of Florida the State Board of Health is given the right to isolate a patient with an infectious disease, but that the patient selects his own physician, and that the Board has no right to thrust treatment upon one in confinement.

He had paid no attention to the bill, he said, that he was not sick enough to need treatment any way—that he had treated himself.

#### Exhibit No. 9

##### Statement of Emma Lennox (Colored)

(Emma Lennox was an old colored woman that had smallpox, was sent out to the hospital, and at about the time she recovered her two grand children developed it, and were sent out there and she went out and took care of them.)

Asked if she had had smallpox at the hospital, she said she did.

Asked how long ago, she said about three months.

Asked if she had some grandchildren out there with it also, she replied that she did and exhibited the little girl that was with her, saying this is one of them.

Q. How did you find things out there? A. Pretty bad.

Q. How did you fare while out there? A. All right, but the bed clothes were ridiculous.

Q. What was the matter with them? A. Dirty.

Q. Did you find any linen out there that had not been used such as sheets, pillow slips, etc.? A. Yes, sir, I saw them.

(At the time of this interview, Emma was just leaving the pest house, where she had been cleaning up. She said she was not through.)

Q. You have just washed up everything, could you tell me about how many sheets you found that had never been used? A. I could not say. I just saw them but do not know how many.

Q. Who got you to clean up there? A. Dr. Jackson.

Q. How did the children fare while out there? A. All right.

Q. Did Dr. Jackson do anything special for them, get anyone to take care of them? A. Yes, sir, he paid me for keeping them there. I was there (meaning she had been there) and he paid me for going out and staying with them.

Q. How much did he pay you for that? A. He has not finished paying me yet, told me to come to town and he would pay me.

Q. Do they have plenty to eat at the hospital? A. Yes, sir.

Q. Pretty well prepared? A. Such as it was it was pretty well prepared.

Q. What was the matter with it? A. Mr. Gause had to cook it himself. I cooked two weeks after I got well myself.

Q. Do you know anything about refuse meat from the butcher being used? A. I do not know for certain where it came from. I could not say. They had some there that I could not eat.

Q. What was the matter with it? A. Not spoiled, but it had hairs all on it, like they had come off of a sack. Where it came from I could not say. I bought beef three times while I was out there.

Q. Did you buy it with your own money? A. Yes, sir, my own money.

Q. Do you know anything about scrap meat and things of that kind being brought out to go around the bananas? A. No, I do not know anything about it. They must have had it before I came out there.

#### Exhibit No. 10

##### Statement of Mr. H. H. Gause

(Mr. Gause is the caretaker of the hospital, who bears an unsavory reputation from lack of personal cleanliness. I was told by a banker that Gause had been in his private office and that the odor was so pronounced that it had to be aired out after his departure. I was told by a member of the Grand Jury Committee that visited the pest house that one of the other members kept away from Gause when on their official visit, saying that he was more afraid of him than of his patients. Was told by one of the old veterans that Gause had a chronic sore leg, dating from a wound received in the Civil War, and that that accounts in part for the unsavory odor. It was said by one of the bystanders that Gause had not taken a bath in years, but it was afterwards learned that this was an error; that some time in last December, under the benign influence of a patient, he had come into town quite clean, and that it had occasioned much comment.)

Q. Mr. Gause, they have quite a little bit of odor stirred up about this place; can you account for it? A. I think I can account for everything.

Q. It seems that quite a good deal of dissatisfaction has sprung up in certain quarters, and I have been sent to inquire into it. The complaint seems to be mainly along two lines, the preparation of the food and the condition of the premises. (Here Mr. Gause broke in to say, there is one



patient in there and you can get at others, and ask them if the food is good and whether it was properly prepared.) I asked one patient this morning and he told me there was enough food, such as it was, or something to that effect. I was told that scrap meats and scraps from the Seminole Club were brought out here to fertilize the bananas, and that you and Captain Burke would sort it out when it got here, take a part of it for table use, and the rest of it would go as fertilizer, and that you ate it and gave it to the patients.

Gause: I can tell you, Doctor, just how that was. There has never been any meat from anywhere in Miami that went into the house except from Feaster's market, and he will tell you that he chunks in a good piece of meat every once in a while, and I take it out home and eat it. As for anybody else ever eating it, they never have. It has never been taken to the table. Mr. Feaster is an old friend of mine, and he would give me a good piece of meat once in a while to eat. You can ask Feaster and Davis in the market.

Asked how he got groceries for the patients, he explained that they were ordered from town at the expense of the State Board of Health as needed.

Asked if it was not understood that he board himself out of the groceries furnished at the expense of the State Board of Health while in charge of the patients, he answered that it was.

Q. Since groceries and meats are furnished at the expense of the State Board of Health, is there any reason why you should feed the patients on meat scraps and sorted meats? A. That was when I had no patients here. When I had patients I stopped hauling meat from town.

Q. Am I to understand that you never had any scrap meat here while you had patients? A. I have never had any scrap meat while patients were here.

Q. Did you have any while Henry Gulick was here? A. No, sir, we had no scrap meat when Henry Gulick was here. Henry Gulick when he was here was a good boy, and after he got well we commenced to have a watermelon patch, and he got a job of fishing, but said he would like to stay here with me.

Q. The Grand Jury, in its presentment, stated that they found abandoned clothes and discarded bedding lying around. A. The bedding was burned up. I put a sheet out to ask Dr. Jackson about, a sheet that had been greased from sleeping in, and I showed it to him and he said burn it up—all stuff like that.

Q. Was that when the committee was here? Yes, sir, I had it on a stump to ask Dr. Jackson about it, and he said burn it up.

Q. The Grand Jury stated in their presentment (speaking of you) that "he is in charge without any help whatever, being nurse, cook and everything else at a salary of \$15 a month and boards himself"? A. Let me explain it to you. About four or five years ago we had a patient here I got \$54 for that. Then there came another patient in July two years ago, and I got no check, and I have been here six years the 20th day of this month. Have slept out of the house one night during that time. Have got no other check, except my regular \$15 a month from then until now.

Dr. Jackson said he was going to make out a bill and collect it for me, \$2.00 a day while I had a patient here. When a patient is here I am not allowed to go to town.

Q. Did you explain to the committee that you had formerly received \$2.00 a day for your services while patients were here? A. No, I had never received \$2.00 a day.

Q. Did you not tell me that you received \$2.00 a day not long ago? A. That was the \$54 check, I do not know how many patients were here, but I suppose it was what time they were here.

Q. Did you not convey to the committee the idea that the sum total of all that you got or expected to get was \$15 a month, as they express it here? Was this a fair statement for you to make? A. I get my board when I have patients here. When I have no patients here I board myself. When I have no patients I get \$15 a month and live in the house. When I had patients four years ago, then I got a check for \$54.

Q. The thing that I want to know is, has the committee treated you fairly in stating this information from you, that Mr. Gause, the man in charge, without any help whatever, being nurse, cook and everything else, at a salary of \$15 a month and boards himself—is that a fair statement? A. No, that is not a fair statement.

Q. In what was it not fair? A. When they came here I had no cook, I could not go and hire a man to do the cooking.

Q. They stated that you were unable to get any help and could not get any laundry done? A. There was an old woman came out here four years ago and did some washing after we had a case of smallpox.

Q. Have you had any smallpox since? A. Not till November 14th of last year. That was the first case we have had since.

Q. Then it is true that after a case of smallpox Dr. Jackson sent a woman to wash up? A. Not sent by Dr. Jackson, I hired her to come myself.

Q. At whose expense? A. Dr. Jackson paid her.

Q. Do you use the same bed linen from year to year without its being washed? A. Never have used the same bedding that has been used without being washed.

Q. After you have had a case of smallpox here, whether black or white, have you never used the same bedding again until it was washed? A. Never.

Q. Do you have a reserve supply of linen on hand that has never been used? A. Yes, I do, some sheets and pillow cases that have never been used.

Q. Have you ever taken the bedding or any part of it from a negro's bed and used it for a white person? A. Never have. I do not allow the negroes to go into the white department, or the white people to go into the negro department.

Q. It has been stated that you have put white patients in negro beds. A. I have not done it.

Q. How long since the toilets in the building have been used? A. About three years.

Q. What is the trouble? A. The drain tile is broken, and it is higher at the cess pool than it is under the house.

Asked how they had managed about the use of the toilet, he explained that outdoor closets and commodes were used.

Asked if he had any cases of smallpox between the group of cases in 1905 and the group in 1910, he said that there was one Frenchman about two years ago.

Asked if Dr. Jackson had sent anyone to clean up after that case, he said the doctor had not.

(I was informed by Dr. Jackson that this case was sent on suspicion but proved not to be smallpox, and no official record was made of the case.)

#### Exhibit No. 11

Statement of Dr. J. H. F. Mullett.

(Dr. Mullett is one of the practicing physicians of Miami, who on March 17th, [six days after the committee of the Grand Jury visited the pest house] visited the pest house himself, in company with Dr. Jackson and Dr. Jaudon Dr. Mullett is a disinterested party.)

Q. You have treated some cases out there, Doctor? A. I have sent one fellow out there, but that is all.

Q. You visited the pest house? A. Yes, sir, with Dr. Jackson and Dr. Jaudon the other day. Just after one of those cases of "chicken pox" came in.

Q. Did you look around the premises as to its condition? A. Yes.

Q. Did you see anything that would make you think that water or slop had ever or could, stand under the house? A. No, not unless the pipe was broken, for it is higher under the house.

Q. Did you look for flies? A. I did not see any flies that I know of, not more than any other place. Very few of them. None in the house.

Q. Would you say that there were fewer or more than you would find in an ordinary restaurant in town. A. There are millions in the restaurants where there are none out there. I do not know that I ever saw one. We spoke about it out there. Things could have been kept a little cleaner than they were as far as the housekeeping goes, but flies were rather conspicuous by their absence. About the water that runs under the house, it seems to be some kitchen water thrown out of the window, but was not running under the house, just at the edge of the house, did not go two feet under. Did not back up under the house at all, could not do it in fact because it is higher under the house. Did not come from the drain pipe.

Q. Did you go through the building? A. Yes.

Q. Did you notice any odors in the toilets in the building? A. Perfectly clean. Flushed out all right, no trouble.

Q. There is nothing the matter with the flushing? A. The day we were out there Dr. Jackson flushed one of them and that was all right. As I said I have seen neater housekeepers than the man out there, but have seen much

dirtier places than that in town. Can take you to dozens of them on Avenue D. not very far from here.

Q. When did you visit the pest house? A. On Friday, March 17th, 1911.

Q. Was anybody cleaning up at the time? A. No, it had not been touched since the Grand Jury was out there, but Dr. Jackson left orders to have the place cleaned up. As he says he always does after a case.

Q. Were there any patients there while you were there? A. One had just come in. I think the day before one had gone away and this one had come in that morning.

#### Exhibit No. 12

Statement of Dr. S. M. Frazier, (colored).

(Dr. Frazier is a colored physician in Miami who has never visited the hospital in Miami, but has sent patients out there, but was interviewed for the purpose of determining satisfaction or dissatisfaction that might exist among the colored patients who have been there.)

Asked how many patients he had sent out there, said that he had reported about five to Dr. Jackson who had sent them out.

Asked if he knew how the patients had been treated, said he could not say as he had never been there.

Asked if any of them had made any complaints to him said that they had not. But that after they had gotten back, they had spoken to him as if they got along all right. As far as he knew they were all satisfied, and that he had talked with them about it.

#### Exhibit No. 13

Statement of Dr. J. F. Jaudon.

(Dr. Jaudon is one of the practicing physicians in Miami, the one to whom Mr. Gulick applied for treatment, after Dr. Huddleston's diagnosis of ivy poison. He was also the attending physician of Mr. Humphries, who was out there with smallpox at the same time that Gulick was.)

Q. One of the things that I want to find out from you is who was Humphries physician? A. Myself.

Q. Dr. Huddleston was not his physician at any time? A. No. He was invited once to see the man but refused. I invited him to go see the patient but he point blank refused to go. I sent Dr. Gramling to take him in his car but he would not go. He had some difference of opinion about the first case, and I simply wanted him to see the second.

Q. When Gulick was out there, was he very sick? A. He was not sick at all.

Q. Did you ever find him in bed? A. Yes, but he was not sick enough to be there. It was simply laziness.

Q. Was he ever sick enough to require medical attention? A. Only such as to care for the eruption of the skin.



Q. When did you submit a bill to the family, after his dismissal? A. I have never submitted any as yet, but will and intend to collect it, too.

Q. You never told them that you had a bill or told them that you were going to send them one? A. I told them that the State would care for the patient while out there but that the physician was a private matter and they would have to pay the bill.

Q. Did you tell them that at the time he was there? A. Yes sir.

Q. Did he ever complain to you about the food or anything else while out there? A. Not once, he said as soon as he was well he was going to take his gun and go back out there. He enjoyed being there. In one of the photographs I took of him he was smoking a cigarette and he told me not to put that in as he did not want his mother to know he was smoking cigarettes. He never said once he was dissatisfied with anything at the pest house. He seemed perfectly satisfied.

Q. What was the general condition as to flies when you were out there. A. Very few flies at any time.

Q. You visited this place about five days after the committee did, in company with Dr. Jackson and Dr. Mullett? A. I did.

Q. Did you look specially for flies at that time? A. I did.

Q. Comparatively speaking, has the average restaurant in Miami, more or less flies than the pest house? A. I did not see any flies there where I see thousands of them in the restaurants here.

Q. Did you look under the house for evidence as to whether the sewage had ever backed up there? A. It is impossible for the sewage to back up there, as it is higher under the house than anywhere else.

Q. Did you go into the toilets? A. I did, and it worked all right. Was not clogged at all.

Q. Did you detect any odor? A. None whatever, and I particularly looked for it.

Asked how many times he visited the pest house while Gulick was there, the Doctor produced his books and showed the dates as follows: November 14, 16, 18, 23, 26, 27, 29 and December 3rd. (It will be remembered that the patient in question was confined there from November 14th to December 3rd. On the last date the Doctor brought him back in his automobile.)

Q. Was the other patient, Mr. Humphries, very sick? A. For the first couple of days he was very sick with fever, after that he was not very sick.

Q. Was he up and about most of the time? A. Yes, sir.

Q. Those same visits covered both patients. A. Yes sir.

#### Exhibit No. 14

##### Statement of Dr. Huddleston.

(Dr. Huddleston is a practicing physician in Miami, to whom Gulick first applied for treatment, and whom it seems, made a diagnosis of poison ivy, but afterwards when it was diagnosed as smallpox by Doctors Jaudon and Skaggs, changed his diagnosis to Chicken Pox.)

Q. I notice a letter from you, Doctor, in the Miami Metropolis of March

15th, 1911, which I want to get a little information about, if you please. Your postscript states that the latter part of this is based on one of the patient's statements? A. Yes sir. The latter part is on Mr. Humphries statement.

Q. In regard to the Gulick case, there was a difference of opinion in regard to the diagnosis at the time. As you look back at that case in retrospect, what is your opinion? A. He had a plain case of chicken pox.

Q. How do you reconcile that with the fact that he staid out there with small pox about two weeks, without getting it? A. My reconciliation is that the second man mayn't have had it. That is the only way that I can patch it up.

Q. You mention Dr. Porter in this article, was there ever any difference between you and Doctor Porter about yellow fever in 1899? A. We never had any particular trouble, no words of any kind. We did not agree on our diagnosis on one case here.

Q. Is it true that you were influenced to see the Judge after this presentment of the Grand Jury, to induce him to issue a warrant? A. No sir, I never approached him on any such errand. Did not even go to the Grand Jury. One of the members of the Grand Jury came to see me and I said I would go if I was called, but I was not called.

Q. Was it while the Grand Jury was in session? A. Yes.

Q. Were you not under the impression sometime ago that some of the other physicians had not dealt quite fairly with you as they had not called you in consultation? Has there not been a difference since then? A. No, I have never had anything to do with them one way or another. We have met in society once since then.

Q. But never in consultation? A. No.

NOTE.—The postscript of Dr. Huddleston's published letter is as follows: "the latter part of this letter rests upon the statement of the unfortunate one who was incarcerated against his will in this pest hole and if any of the Doctors wish to reply in self defense, or otherwise, I have no doubt that the pages of our daily papers will be open to them."

Asked if the unfortunate one referred to there was Mr. Gulick or Mr. Humphrey, he replied that it was Mr. Humphries.

NOTE 2.—Doctor Huddleston was not at any time it seems the attending physician of Mr. Humphries.

#### Exhibit No. 15

##### Statement of Mrs. Henry Gulick.

(Mrs. Gulick is the mother of the young man who was a patient at the smallpox hospital. They are from Pittsburg, spending the winter here and living in a tent just across the Miami River. It was Mrs. Gulick and her son that appeared before the Grand Jury, giving testimony against the hospital management. Mrs. Gulick has no direct information, but only second hand information received through her son. She stated that she had been out there, near the hospital, but not to it.

Mrs. Gulick apparently evaded interview. We called to see her twice during

the forenoon of Thursday but both times she was out. Told her brother-in-law my mission, that I was very anxious to see her. Friday we called twice during the forenoon and again she was out both times. It was then undertaken to locate her in town, which we finally did in a store shopping. Leaving the stenographer in the carriage, I approached Mrs. Gulick, introduced myself, and explained my mission, and requested a few minutes interview. She said she was busy shopping, I told her I had a carriage and that it would not take more than 15 minutes to go to a hotel and get through it, but she could not do it. I told her I could wait till she got through shopping, if she could give me some idea how long it would take her, but she did not know. Whereupon I gave it up as hopeless and left. Upon further reflection, resolved to return and renew the request and get a stenographic report of her answer. The stenographer being with me this time, she said she was through and went with us to the hotel parlors.)

Q. What was your chief complaint? A. My chief complaint was the unsanitary condition of the place, and the food that was given to my son while there.

Q. Was the food sufficient in quantity? A. Not always.

Q. Was there any fault with the quality? A. It was very dirty and came to him black. It was simply a question of existence, he had to eat it. Did not want to die on the place.

Q. Was he satisfied with the medical attention he received while there? A. While he was there, I do not know just exactly what his medical attention was. I saw Dr. Jaudon every day and he said that he saw him every day, but I learned afterwards that he was not out there as often as he stated.

Q. Did you get any information about this before your son came back. A. Yes, I got the information before he came back.

Q. Through what source? A. Through the man that came in for supplies. I gave him things to take out with him, of course, I did not know that he was not receiving good substantial food or I would have sent him other things.

Q. After you got information enough to act upon, who was the first person you took the matter up with? A. I will not answer that question, because I am not prepared to answer that now. I did make inquiries about what was best to do. I wrote to my husband for his advice in regard to the matter, I did not publish my inquiries and am not ready to publish them now.

(Asked if she was summoned before the Grand Jury or if she went of her own volition, she answered the question but either myself or the stenographer misunderstood her answer, and this was not discovered until the stenographic notes were transcribed, I accordingly went to see her this time but she parried by asking what answer her son made to that question. She was given his reply but refused to make answer again, and said she was not going to answer any more questions, and that if she had to do it over again, she would not answer any of them. It was ascertained from the Clerk's records that she was not summoned.)

Q. After the Grand Jury brought its presentment, did you use your influence to have the Judge presented with a proposition to issue a warrant, that

is did you induce someone to go to the Judge to have him issue a warrant. A. No.

Q. Have you considered taking legal steps to cover damages? A. I have thought of it.

Q. Have you discussed it? A. Some at home, yes. I am not ready to say what I will do in the case as yet, as I said I would rather wait until I get some letters from the north before I am prepared to answer that question. I called on Dr. Jackson and he told me that he had left the place in perfect condition in October. I do not see how it could have gotten in such a condition.

Q. Have you ever seen the place yourself? A. I have not been inside of it, only to the entrance.

Q. Was it while your son was out there? A. Yes. I spoke to him from the outside. He was on the porch.

Q. Was your son satisfied while he was out there? A. No, he was not satisfied. I asked him afterwards why he did not tell me and he said it would not have done any good only worried me, and thought he could live through it and stand it till he got back. That we had come South for my health and he did not want to worry me.

Q. Are you satisfied with the diagnosis of smallpox for your boy. A. Personally I do not believe he had smallpox.

Q. Have you consulted Dr. Huddleston about it since his return from the hospital? A. Yes sir, I have talked to Dr. Huddleston at various times about it, but that was not what influenced me particularly, it was what my son said himself, and there were no marks upon him, and he was not sick enough for smallpox.

Q. Was he sick enough to be in bed? A. He said he was sick in bed six days out there. I was not here and did not see him.

#### Exhibit No. 16

Statement of Dr. James M. Jackson, Jr.

The management of the pest house is conducted and is in charge of H. H. Gause, who was appointed by the State Health Officer on my recommendation, upon the request of the Camp of Confederate Veterans of Miami, he being an old man and absolutely destitute, thought it would afford him a means of support, for which he is paid \$15 per month to look after and care for the house, and as long as he was a caretaker of the house, that he had had smallpox in the army, thought it would give him an additional source of remuneration, and when there have been any smallpox cases he has been employed to take care of them at a salary of \$2.00 a day. Smallpox cases usually being so mild that it requires practically no care, only preparation of the food and some simple assistance.

He was also given permission to clear up such ground as he could and to cultivate same, having the entire proceeds of whatever he made from his crops or from raising of chickens or any other additional revenue that he could derive.



He had the hose that belonged to the institution, which he could use if he wished to do so to irrigate any portion of this land, and to use the water that the wind mill might furnish. During the six years that he has been there, I have seen growing, and he told me repeatedly that he grew, egg plants, tomatoes, I think water melons, sweet potatoes, beans and a good many other things which I do not call to mind now, which, from his statement to me, I should think have been remunerative.

He has also been very successful in the raising of chickens. These facts, of course, are based upon the statements that Mr. Gause has made to me, as I had absolutely nothing whatever to do with his ventures.

Q. What portion of the time are his groceries furnished to him?

A. Whenever there are any smallpox cases out there, he eats from the groceries furnished for the use of the patients. From November 24th to March 15th, there were \$192 worth of groceries furnished for the use of himself and patients, and the bills for which will be furnished, and a triplicate copy of which are on file in my office.

Q. Is he limited as to the articles of diet or the quantity that he purchases out there, any more than a general economical procedure?

A. Absolutely none. I have instructed Mr. Wharton of the Magnolia Grocery Company to furnish groceries upon his order, when patients are there, without my supervision.

Q. Is there any reason why patients should have cause to complain at the quantity or quality of food furnished that you know of?

A. Not unless Mr. Gause is too lazy to get it. Because he has a carte blanche order to do so.

Q. Then, in this final analysis, as I understand the matter, while there are smallpox patients there, Mr. Gause's income from the State Board of Health is \$2.00 a day and board?

A. Yes, sir.

Q. When there are no patients there, his income is \$15.00 a month as caretaker?

A. Yes, sir, and what he can make. Because he is not required to remain there during the day or all the time, and whatever he can make on the side, he can. All he is required to do is to sleep there nights.

The house was built and completed by contract, built and completed with flush toilets and sinks, sewerage to a cess pool. These remained in good condition for some time, but recently they have been out of commission and Mr. Gause has been instructed not to allow patients to use them until such time as the house can be freed of smallpox and the sewerage put in good condition. Patients being required to use out-of-doors closets instead of the sewerage closets.

Q. Are there any heating facilities? A. When the house was built there were flues put in so that stoves could be put up if necessary during the cold weather, but the weather has never been such that it was thought necessary to require artificial heat to keep the patients comfortable, and therefore no heating stoves have been erected.

At the time of the equipment of the hospital, there were 23 beds with blankets, linen, bed linen, night shirts, table ware and linen, supplied.

Since the equipment of the hospital there have been very few cases and consequently there has never been any addition made to this equipment, and because it was not thought necessary. There has never been a sufficient amount of patients there, so that all the original bed linen has had to be used. In fact, on March 15th, there remained quite a number of new sheets, pillow cases, some night shirts, that had never been used at all. It is the custom when patients are at the hospital to use the linen from the supply on hand and, when removed from the bed, to have it thoroughly sunned for disinfection, then stored away till after all cases are dismissed, when some immune person is employed to wash up all linen and beds, and scour out the house well, and disinfect it with sulphur, so as to make it as non-contagious as any other dwelling in the county. In this condition it remains till some other infection or some other disease or cases of smallpox come up. It has been now, or it was, about five years from the last case up to the present group of cases, dating from November 14th, and there is no doubt but that our long period of immunity and the non-use of this house, and the out-of-the-way location of the property, may have made me a little lax in seeing that it was absolutely as clean as it should have been kept.

Q. Was there ever a negro patient in this hospital, prior to the present group? A. I think not. I could not tell you without looking it up. The hospital is arranged with two rooms on each end and two rooms in the center, with hallways separating the three groups. The north end rooms were designated to be used for colored patients and the south end rooms for white patients, but I am of the opinion, if my memory serves me correctly which I think it does, that there never was a colored patient carried to this hospital and cared for until December 31st, 1910, when one J. H. Green was sent there.

During the time when patients are in the hospital, it is the custom to visit the institution on an average of every two or three days, unless it is during a period of convalescence. Days I do not visit the hospital I am kept informed as to the condition of patients by a note from the keeper, brought by bearer, which note he is instructed to base upon the facts he may ascertain after questioning the patient.

Q. Do you consider that a smallpox patient needs any medical attention whatever, after convalescence is thoroughly established, until he is ready to be dismissed? A. Absolutely none, and 90 per cent of them before convalescence need none. If they receive the proper care, food in moderation, no medication is of any service to them. When it is a case of moderate severity or a mild case it only needs a little medical attention, just before the eruption appears.

Q. After the eruption appears, has it been your observation that there is a general subsidence of suffering? A. There is a general subsidence of all symptoms, and the greatest trouble we have with these mild cases is to keep them from infecting other people. Because these mild cases are the ones from which we get our epidemics. Because they are able to walk around and scatter the germs well. It being necessary for the comfort of these patients and to prevent pitting as much as possible, to keep

these patients' skin well greased, they will often go around the house in their bare feet and the grease from their bare feet, together with such dirt as they may bring in from walking around the yard, oftentimes with a series of cases, makes the floor rather dirty. This greasing of the body also causes the bed linen used only a very short time to present a very dirty appearance, when it has been used possibly not more than one or two days.

During this last series of cases, we had to remove to the pest house three colored children, which were grandchildren of Emma Lennox, and, being little tots, I felt sorry for them and paid the grandmother to assist Mr. Gause in caring for them.

The majority of the cases when sent to the pest house are given their option of walking out and being paid by me for the walk or having a conveyance to carry them out, and the majority of them walk out and accept the \$1.00, the pest house being a distance of two miles from Miami. Being called to a patient, I say to them: "We will call a conveyance and have you carried to the pest house, or we will give you \$1.00 if you walk out yourself." Nearly all of them say, "I will walk out, boss, and take the \$1.00."

The location of the pest house is in the middle of a 15-acre tract, donated by Dade County to the State Board of Health for the erection of a contagious disease hospital, on a sandy, rocky soil of good drainage. I have never seen anything of an unsanitary nature around the premises.

Q. What do you mean exactly by that word unsanitary? Do you mean anything that will militate toward the production of diseases? A. Yes, sir.

Q. You make a difference, do you not, of ordinary trash, tobacco pouches, paper and such things as will accumulate about a place that is not scrupulously kept? A. Yes, sir.

Q. You make a difference between that and the sanitary place? A. Yes, sir. There have been times when there might have been some clothing or bed linen which had become worn, that was deposited either on the fence or some place around the yard, where it would come in the greatest contact with the direct rays of the bright sunshine, which we know to be the best disinfectant, artificial or otherwise, until such time as they might be seen and ordered burned by the agent of the State Board of Health in charge.

Q. Do you consider, Doctor, that nothing but sunshine applied to linen will disinfect it thoroughly? A. Yes, sir.

Q. Is that the consensus of medical opinion throughout the world? A. Yes, sir. And while the yard may have presented an untidy appearance, it has never at any of my visits shown an unsanitary condition further than the small puddle of water which was produced by throwing dish water from the kitchen window, and would have been corrected at an earlier date but for the fact that there were smallpox patients in the house, and I did not think the urgency of the situation demanded the exposure of a plumber to the possible infection while cases existed there.

Q. What is the character of mattresses at the hospital?

A. The mattresses in the hospital are not of the very best quality, but they were bought at the time the Miami Sponge Mattress Company were making mattresses in Miami, and when bought were very comfortable. But age has hardened them, and they are not the most comfortable bed in the world, but to a person who likes a reasonably hard bed they are considered very good. They are the same beds and springs, outside of the mattress, that are now being used by the Friendly Society Hospital, a charitable organization in this city.

Q. Are these sponge mattresses being used by the construction camps at the Florida East Coast Railway Company's camps?

A. I do not know. They were for a while. These sponge mattresses were very popular in Miami, and were used largely in the construction camps of the Florida East Coast Railway Company and many other people, but unfortunately they did not prove to wear. They have, however, not as yet been replaced by others at the hospital.

#### Exhibit No. 17

##### Statement of Mr. F. H. Wharton

(Mr. Wharton is the dealer who furnished the groceries for the Isolation Hospital.)

Mr. Wharton, I am here inquiring into the conditions at the Isolation Hospital, and you, I understand, have been furnishing groceries out there?

A. Yes, sir.

Q. Have these groceries been furnished upon Mr. Gause's order?

A. They have.

Q. Was there any supervision over that by Dr. Jackson or anyone else, or did the orders simply come in to you from Mr. Gause and you filled them? A. The orders came in from Mr. Gause and I filled them.

Q. What were Dr. Jackson's instructions to you as to limitations, Mr. Wharton? A. When the thing first started Dr. Jackson was not here. Dr. Gramling had charge of the patients and he told me to let Gause have what groceries he wanted out there for them. And I have been filling Gause's orders ever since.

Q. I can get a bill for that, I suppose, and Dr. Jackson already has one? A. Yes, sir.

#### Exhibit No. 18\*

F. H. Wharton

March 23, 1911.

State Board of Health, Pest House, bought of Magnolia Grocery Company, inc.

1911

Nov. 30, Bill rendered ..... \$14.90

Dec. 31, Bill rendered ..... 46.51

1912

Jan. 31, Bill rendered ..... 30.56

Feb. 28, Bill rendered ..... 50.70

Mar. 23, Bill rendered ..... 49.58

.\$192.25

\* Itemized bills on file in office of State Board of Health.



## Statement of Terebas Maycock

(A colored man who had smallpox at the Isolated Hospital and is now working out there.)

When asked about Mr. Gause, he stated that he is careless with himself, and then careless about preparing the food and things like that. He would bring the food to you when he was not in a condition himself fit to bring it. He could keep himself a little cleaner than he does and a little more decent. "Since I have been there I have never seen him wash his hands and I have been there 18 days. He has a sore leg which smells pretty bad. I have seen him handle that sore and then go into the kitchen and fix food without washing his hands. Have also seen the rag drop off of it. That old woman out there told him about it. Every time you got close to him you could smell it.

"He has helped me to clean up a little bit, but says he cannot stand on his feet long. He would turn the hose on the walls for me, but I would have to scour the floor up. I also helped the old woman out there too, clean the blankets, etc., as they were too heavy for her to wring out herself.

"I saw some sheets put in the wash the other day that were cleaner and more decent to sleep in than what I had given to me when I went out there. I slept in the bed that Joe Green slept in, the sheets were not changed.

"When I got there that night he said, well here is another one come and I have nowhere to put him. And he asked Eli, another patient there, if he could spare one of his blankets and he said no, and then he asked the old woman in the room to spare one, and she said no. They are both colored people. Then he said I would have to take that bed and I found out that it was the one that Joe Green had slept in, and he had smallpox.

"When I carried the boy up there, he wanted to give him the same bed that I slept in, and I heard Dr. Jackson tell him to give the patients clean things. I told him to give him new blankets and he said he could not find them. I went into the room where the woman was and took two blankets out of her room, a little cleaner than mine, because she would hang them out doors. We took them off her bed. They had plenty of other blankets without using these. He just did not give them to us.

"I heard Dr. Jackson give orders to give the patients clean bedding."

## SPECIAL REPORT

OF

DR. HIRAM BYRD

Assistant State Health Officer of Florida

ON

The Prevalence of Typhoid Fever at Tampa, Fla.  
During the First Six Months of 1911.

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## PREVALENCE OF TYPHOID FEVER AT TAMPA, FLA., DURING THE FIRST SIX MONTHS OF 1911

SPECIAL REPORT OF DR. HIRAM BYRD

JACKSONVILLE, FLA., August 6, 1911.

*Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.*

DEAR DOCTOR: Pursuant to instructions, I have inquired into the typhoid fever situation in Tampa, and have the honor to report as follows:

Upon arrival in Tampa I visited Mayor D. B. McKay and acquainted him with my mission, at the same time assuring him that there was no disposition on the part of the State Health Officer to inject the State Board of Health into a local situation, but that, owing to the fact that certain prominent people had contracted typhoid fever while at Belleair and that in consequence a man from Chicago had been sent down to investigate it, and that the investigation had resulted in fixing the blame, whether justly or unjustly, on the milk supply of Tampa, and the entire incident had given rise to much speculation as to the extent of prevalence of typhoid in Tampa, it was considered by the State Health Officer to have assumed more than local importance.

The Mayor expressed his pleasure at the action of the State Health Officer in the premises and offered at once to give every assistance possible, which offer he made good as the inquiry proceeded.

I next saw Dr. Sheldon Stringer, City Health Officer, who, with the Mayor, stood ready to give every assistance possible.

So much for the preliminaries. The first thing then was to determine the number of cases of typhoid fever that have occurred in Tampa during the year, their distribution as to time and location, and the source of milk used, as well as the exposure to possible fly infection.

### CASES AND DEATHS

The records of the City Board of Health were consulted to get the number of cases that had been reported there, and the records of the Laboratory of the State Board of Health were consulted



to get the cases diagnosed there; besides, the several physicians reporting cases were also consulted to get record of any cases that might not thus be included.

In this way a record of 121 cases since the first of January, 1911, was secured. It is not to be inferred from this that that is all, for records obtained in this way are necessarily more or less incomplete, and a certain margin of error should be allowed.

The number of deaths by months from January to June, inclusive, are as follows:

January .....	2
February .....	1
March .....	2
April .....	3
May .....	2
June .....	3
Total .....	13

It is reasonable to assume that a certain number of deaths from the June cases will occur in July. It is reasonable to allow for three such deaths. That would make a total of 16 deaths for the first six months of the year. Allowing for a twelve per cent. mortality, the number of cases based upon the reported deaths would approximate 133.

Altogether it is believed that the number of cases conservatively stated would be between 120 and 150 for the half year.

#### DISTRIBUTION OF CASES

The recorded cases have been distributed as to time as follows:

January .....	10
February .....	7
March .....	9
April .....	12
May .....	15
June .....	47
July .....	21
Total .....	121

It was undertaken to plot the cases on a map so as to determine their distribution as to location. But it was soon learned that they have been distributed over the city very nearly in proportion to the density of population.

#### WATER SUPPLY

The water supply has been in nearly all cases varied. A large portion of the city is supplied with city water and the rest with pump and wells, but few people there be who do not occasionally take water from some other source than the regular home supply. There is no reason, however, for thinking that the water has been a factor in the prevalence of the disease.

#### MILK SUPPLY

The milk and cream supply of Tampa comes from two sources, viz., the greater part is produced locally, but a small portion of cream is shipped from elsewhere into Tampa. As indicated, this latter portion is very small and is not to be considered in this connection.

The home supply consists of anything from a single cow supplying the family, and perchance a neighbor or two, up to a dairy of considerable size.

The dairies distribute milk directly to the homes, to drug stores, ice cream places, hotels and wholesale milk houses.

So that among the typhoid patients will be found people who have had no milk, or milk from home cows, neighbors' cows, dairies, drug stores, wholesale milk houses, etc. From which it will be seen that the collecting of back records of cases with reference to the milk supply is difficult, and the final product more or less unreliable. When a few weeks or months have elapsed, people forget where they got milk at a particular time, and this vitiates the records.

The records obtained were as follows:

Of the typhoid cases, 38 used no milk, 18 used milk from cafes, 3 used milk from private families, 3 used milk from the Tampa Dairy Co., 2 used milk from Schafer's, 2 used milk from W. A. Fisher, 1 used milk from own cow, 9 used milk from nine several sources, and in 45 could get no record of milk supply.

Analyzing the above table, the first thing that strikes one is

that 38, or nearly one-third of the cases, used no milk at all. So that whatever other conclusions are drawn the bold fact must stand out that practically *one-third of the cases were not milk-borne*.

The next 38 cases used milk, but from more than 15 different sources—fourteen excluding the cafes—and it is not known even approximately how many cafes were patronized by the 18 cases in question; and, excluding the cafes, the maximum number using milk from the same source was 3.

The third and last group of 45, slightly over one-third of the entire number, we could get no record of. If our knowledge were complete, these 45 cases would be distributed among the other two groups and would probably change the figures somewhat, though with a record of two-thirds of the cases indiscriminately taken, it is likely that we have at least an average for the whole.

To recapitulate, then: Our records for 45 cases, or a little over one-third, are incomplete and throw no light upon the situation. But of the remaining two-thirds, the cases that do throw some light upon it, one-half used no milk at all, while the other one-half used it from more than fifteen different sources; and, excluding the cafes, 3 was the maximum number using milk from any one source.

*From which it will be seen that there is not one shred of epidemiological evidence to cast suspicion upon the milk supply.*

Having reached this point, and before the milk supply is dismissed, it is pertinent to introduce a special report by Drs. Irons and Jordan of Chicago, covering a typhoid outbreak at Bellevue Hotel, and traced, it is alleged, to a certain dairy in Tampa. The conclusions reached by Drs. Irons and Jordan are entirely at variance with the conclusions arrived at in this report, hence it is but just to let them state their own case in its entirety. Their report is as follows:

#### REPORT OF DRS. JORDAN AND IRONS

Mr. H. D. Saxton,  
71 Broadway, New York, N. Y.

Dear Sir:

In accordance with your instructions we have made an investigation into the sanitary conditions at The Bellevue Hotel, Belleair, Fla., for the purpose of ascertaining the cause of certain cases of typhoid fever which developed among the guests of the hotel. This investigation has been attended by unusual difficulties because when we began our work the Hotel had been closed one month, the guests were scattered, and many of the possible sources of evidence and

information gone. We believe, however, that we have succeeded in locating the source of infection, and can show how future difficulty can be avoided.

We desire to acknowledge the assistance we have received both from those in charge of Hotel affairs, and from others who furnished us with valuable information.

Mr. J. J. Eldridge, in charge of Hotel property at Belleair, rendered valuable assistance in the sanitary survey of the Hotel itself, and in placing us in touch with those who had furnished supplies during the season.

We are especially indebted to Dr. C. R. Wilcox of Clearwater, Florida, who spent several days in assisting in following the various clues. Without the information preserved by Dr. Wilcox, many of the links of evidence undoubtedly would have been lost.

We also wish to acknowledge the assistance rendered by Mr. Barritt of the Tampa Dairy Company, whose letter at his request is attached to this report.

We have records of 10, (possibly 12) cases of typhoid fever in guests of The Bellevue, and have inquired carefully into diet, previous health, previous and subsequent residence, etc., of these individuals. Several had been residents at The Bellevue for from four to ten weeks before becoming ill, and had had no demonstrable opportunity for contracting the disease elsewhere than at The Bellevue. For this and other similar reasons we may conclude that we are dealing with a series of cases of fever originating in guests while they were resident at the Hotel.

A consideration of the dates of arrival, departure and onset of illness of guests at the hotel, furnishes valuable preliminary information. The dates of onset of illness of those who contracted typhoid, fall within a relatively short period. (Approximately March 17th to April 7th.)

Within this short period, a closer scrutiny of the dates of onset of illness, shows that they fall into two groups, (March 17th, 19th, (2), 20, 4 cases; March 27th, 30th, April 1st to 4th (3) April 7th, 6 cases.) This peculiar grouping of cases will be referred to later.

The number of guests, as we are informed, varied from 250 (January) to 350 (February to March). Allowing for the transient character (relatively slight in this instance) of the hotel population, the number of cases which developed would correspond to something over 100 cases in a town with a fixed population of 5,000. The fact should be noted that where a number of people are exposed to the same degree of infection, only a certain proportion contract the disease.

Typhoid fever is caused by the typhoid bacillus which reaches the person attacked practically invariably by way of the gastrointestinal tract usually with some article of food or water. It is known that after the ingestion of infected material, a period elapses before symptoms of the disease (fever, etc.) appear. This incubation period is variable, and may be as short as seven days, or as long as three or more weeks, depending on the condition of the individual, the amount of typhoid bacilli ingested, etc. The incubation period is *usually ten to fourteen days*.

Going back ten to fourteen days from the date of onset in all the cases of which we have a record, we have the period approximately March 1 to 25th, or, if



we consider the sub-groups, we have two periods, March 1 to 10th and March 15 to 25th, when something unusual happened. Furthermore, we have been unable to find that any guest who left the Hotel before March 1st has been ill, and all of those who were ill arrived before March 20th. One additional probable case (No. 11) from whom we have been unable to obtain full data, left the Hotel March 9th, so that if the cases were due to a common cause, it was operative as early as March 9th.

We pass to a consideration of the possible sources of infection:

#### I.—WATER SUPPLY

A—*Spring Water*—used for drinking purposes. Analysis shows no evidence of contamination. Surroundings of spring water system, and relation of spring level to tides, etc., are satisfactory from a sanitary standpoint.

A number of persons (45-50) who were not guests in The Belleview, used the spring water, and did not develop typhoid.

The spring water did not cause the typhoid fever.

B—*Lake water*—used for watering greens, in hotel kitchen, laundry, bath room, and in quarters occupied by help.

This water is used for drinking and other purposes by some fourteen families (27 adults and 27 children) in the village of Belleair. It is also used by a floating population of fifty. None of these 100 individuals has developed typhoid fever. Certain of the guests may have used this water in bath rooms or on the golf course (5th tee) but several of those ill with typhoid are known not to have used it.

Analysis shows some contamination as may occur in any similarly situated surface water.

A complete sanitary survey of the surroundings of the lake show no evidence of typhoid in families living to the east. (population approximately 50 negroes.) This was determined by personal inquiry at each home.

While the lake water supply cannot be regarded as an entirely safe supply, there is no evidence that it has caused typhoid fever this year, nor in any preceding year.

#### II.—ICE SUPPLY

Ice is artificial, from distilled water at Clearwater. Clearwater water supply from driven wells. Analysis shows no contamination in Clearwater water supply.

#### III.—VEGETABLES

The green vegetables were obtained from three chief sources. In none of these localities has there been any typhoid fever. From the study of the data obtained from guests affected, there is no reason for believing the vegetable supply to be at fault.

#### IV.—MISCELLANEOUS CAUSES

We have looked into the possible relation of fish, oysters, presence of flies,

sewerage system, etc., to the cases of fever, but we find no evidence for believing that any of these were concerned in the causation of the outbreak.

#### V.—MILK

The milk supply came from two main sources.

A.—A local dairyman furnished about five gallons of milk per day throughout the season.

There was no typhoid at this farm. Three families who used the milk from this dairy only, remained healthy.

B.—The Tampa Dairy Company furnished 20-25 gallons of milk during the height of the season (Feb. and Mar.) and about half this amount during January and the last of March.

This milk came from a number of dairies near Tampa. The milk from all the dairies was regularly mixed at the Dairy Company's warehouse, and The Belleview supply was drawn from the mixture. Consequently, it became necessary to trace all the milk hauled by the Tampa Dairy Co.

Dairies A. B. C. D. E. and F. furnished milk in constant amounts throughout the period January 1st to April 1st. With the exception of Dairy F. these dairies were fairly clean and well managed, and there were no possible typhoid carriers among employees. Dairy G. furnished small amounts of milk from January 16th to February 15th. Dairy H. furnished small amounts January 1st to 21st, and Dairy K. January 12th to 30th and February 15th to 20th. These latter dairies are inferior from a sanitary standpoint, but the periods when they appear in the general supply do not coincide with the period when the infection must have occurred. We find, therefore, no adequate evidence for thinking that the fever originated in the milk supply. This view is further supported by the facts that (1) several of the sick individuals used practically no milk, and (2) a number of guests used milk freely and did not develop typhoid.

#### VI.—CREAM

Cream was furnished exclusively by the Tampa Dairy Company. The supply was derived from (1) Companies L. and M. (Wholesalers in neighboring states.) (2) from Dairies N. and O. and (3) separated from milk obtained as indicated under section V. above. Sources 1 and 3 were fairly constant throughout the season. Dairy N. (good sanitary surroundings) furnished cream in small amounts during January and February only.

Dairy O. furnished cream to the Tampa Dairy Company, as follows:

Period 1 Jan. 3-8	.....2 gallons per day
Period 2 Jan. 16-28	.....2 gallons per day
Period 3 Feb. 3-8	.....2 gallons per day
Period 4 Mar. 7-10	.....4 gallons per day
Period 5 Mar. 14-24	.....4 gallons per day

The daily consignment (2 gallons each) during the first three periods

were small, and we are informed that they were sent out by the Tampa Dairy Company in original packages to fill small local drug store orders, and hence did not reach the general cream supply. The daily consignments during the two latter periods were larger, and though on some days they may have been sent to local dealers in original packages, on other days they were mixed with the general supply of the Tampa Dairy Company, 2-5 of which went to The Belleview.

A portion (1-5) of the remaining 3-5 went to Hotel Y. The record of guests at this hotel was not accessible, but we obtained information that at least one case of typhoid occurred among the guests, although it was thought that this patient was infected in another city. The remaining portion (2-5) of this cream went to local drug stores, to be served in iced drinks, etc.

The sanitary conditions in Dairy O (68 stall-fed cows, 100 gallons milk per day) are filthy. The milk room (in the cow barn) is unscreened, black with flies and within ten feet of the open cow barn and 20 feet from the milk room is an open, used privy. One of the milkers (employed from February 1, 1911) had typhoid fever some years ago. The methods of milking and the handling of the milk are as objectionable as the surroundings.

A portion of the milk from this dairy, perhaps 1-3, is dispensed by wagon to customers, among whom typhoid cases are known to have occurred. The remainder of the milk is passed through a separator and the cream sold. The consignments of this cream to the Tampa Dairy Company have already been traced. (See above.) The remainder of the cream from this dairy goes to local drug stores through distributing Company P.

The above dates of cream shipments from Dairy O were obtained from the books of the Tampa Dairy Company, after the other facts in regard to the milk and cream supply had been ascertained, and correspond with striking exactness with the periods of probable infection as determined from the dates of onset of the typhoid sufferers. If Dairy O was responsible for the typhoid at Belleair, similar effects should be found among the users of the remainder of this dairy's products.

We therefore regarded it pertinent to this investigation to inquire so far as opportunity allowed into the typhoid situation in Tampa.

We may summarize the information obtained in this matter as follows:

1. A conservative estimate of the cases of typhoid fever in Tampa during March and April would be from 100 to 200 cases.
2. The water supply is apparently not concerned in the epidemic.
3. Various attempts by local investigators to find the cause of the fever have failed in most instances to demonstrate any relation to home milk supply, etc.

Incidentally we obtained records of some twenty of these cases, in which only the common factor was the use of iced drinks, in which cream is used in drug stores. The date of onset of these cases (unselected) were for the most part in February, March and early April.

Other sporadic cases of typhoid which we discovered in the peninsula of Hillsboro County, and whose movements we were able to trace in detail, gave no history of possible exposure, except the taking of iced drinks in Tampa within the incubation period of their illnesses.

From the above evidence, we believe that the cases of typhoid fever originating among the guests of the Belleview Hotel during March and April, 1911, were due to certain shipments of infected cream which reached the hotel indirectly from Dairy O mixed with other cream in the general supply, during two periods in March (March 7-10, March 14-24). It is hardly necessary to add that the management of the Tampa Dairy Company had no knowledge that the conditions in Dairy O were bad.

#### Typhoid Fever at Clearwater, Belleair and Dunedin

With the exception of two cases of typhoid at Dunedin to be referred to later, a careful inquiry has revealed no case of typhoid fever or other non-malarial fever at Clearwater, Belleair, Dunedin or surrounding country during the past year.

There are four or five cases of typhoid at St. Petersburg. In one section of the latter town conditions are not good, and there is also a considerable intercourse with Tampa. The milk supply is local. At Ulmerton, 1 case, March 26th, no trace of origin.

At Clearwater seven years ago there were two cases, both of which had been traveling extensively. Two years ago, one case in a man who traveled back and forth to Tampa. Since then no cases.

At Tarpon Springs at least one case has occurred. This man had been traveling. There is no reason to believe that these cases had any casual relation to the cases at the Belleview.

At Dunedin there were two cases of typhoid this year. The first patient came to Dunedin from a farm house after being sick two weeks. We have a complete and detailed history of this patient's movements. He had been nowhere exposed to typhoid except during a trip to Tampa, at which time he partook of many iced drinks in drug stores and restaurants. The second case occurred in a woman, to whose home the first one came. This woman became ill three weeks after the arrival of the first case. This was probably a contact infection, although this patient had been in Tampa on February 21st.

#### Diarrhea at Belleview, Clearwater, Dunedin and St. Petersburg

Every year as the warmer weather comes on, cases of diarrhea appear. This year the warm weather began two weeks earlier than usual (i. e. early in February). There was somewhat more diarrhea this year than usual.

At Dunedin (resident population 80-100, winter population 300-400) particularly at Dunedin Club House, there were a number of cases of



diarrhea, but no typhoid. This diarrhea is mostly confined to tourists. Residents do not suffer from it.

At St. Petersburg there was much diarrhea this year.

The water may have slight laxative action.

There was no diarrhea in the village of Belleair (residents and users of lake water supply).

The occurrence of diarrhea is apparently independent of the typhoid fever.

### Recommendations

In order to avoid a possible repetition of this year's experience, we recommend the following:

1. That the milk and cream supply be obtained from a source the sanitary conditions of which are known to be safe. This may be accomplished through the agency of the distributing company, but the satisfactory condition of the producing dairy or dairies should be confirmed at frequent intervals during the hotel season by personal visits of an accredited representative of the hotel management.
2. That a similar censorship be maintained as far as possible over other food supplies of the hotel.
3. That certain projected changes looking toward the removal of stables, etc., to a more remote portion of the hotel grounds, be carried out.
4. That the dining room and kitchen be adequately screened against flies.
5. That the water faucet at the 5th tee be arranged so that the golfers cannot drink the lake water, and that the water supply at the kitchen sinks be so arranged that the lake water cannot in any way come in contact with vegetables or other food. Also, that adequate spring water be supplied in the quarters of the help.

These recommendations as to the lake water are made as a safeguard against future trouble, and not because we believe that the lake water had anything to do with the typhoid outbreak of this year. As matters stand at present, the lake water is a menace only in that it is possible that at any time typhoid bacilli might be introduced into the lake, and an epidemic develop before infection was suspected. A more extended use of spring water is desirable. So far as the available supply is concerned, this is feasible, since at present only a little over 2 per cent. of the flow of the spring is being used.

(Signed) EDWIN O. JORDAN,  
ERNEST E. IRONS

(Enclosure with above report:)

TAMPA, FLORIDA, May 6th, 1911.

Drs. Irons and Wilcox, Clearwater, Fla.

GENTLEMEN: Complying with your request, we attach herewith in duplicate statements from our records showing entire purchases of milk and cream covering the dates fully that you requested.

In addition to this, the writer will take pleasure in personally showing you all of these dairies and furnishing you any other information that you desire in this connection.

As a matter of information, we would like to call your attention to the following facts:

1st. That during the period covering this report we received 300 gallons of milk and, at times, 30 gallons of cream.

2nd. That the Belleview purchased not to exceed at any time during this period 25 gallons of milk and 20 gallons of cream, and this amount was during the months of February and March, the amounts in January and the last few days in March being nearly half this amount approximately.

3rd. That in addition to the cream purchased above, we separated from the milk purchased from 25 to 30 gallons daily at our plant.

4th. That we furnished practically every restaurant in Tampa, and 75 per cent of the drug stores and cool drink establishments, and we conduct a retail store that dispenses 25 gallons of milk and 10 gallons of buttermilk daily.

5th. That we furnished during the same period the Tampa Bay Hotel about half the amount furnished the Belleview, and that we supplied them exclusively, no other milk having been purchased by them from any other source. Also, we furnished the DeSoto about the same amount of milk as the Tampa Bay, and supplied all the ice cream used by them for the entire season. That the combined guests of these two hotels alone would, we believe, exceed the number at the Belleview, not taking into consideration the patrons of the restaurants and cool drink establishments.

6th. That we made in January 700 gallons, February 850 gallons, March 1100 gallons of ice cream from the above products, and sold the same locally, and to several adjacent towns.

7th. That we have heard of no cases of typhoid fever or any contagious disease in any of the above establishments.

All of which we respectfully submit for your consideration.

TAMPA DAIRY COMPANY,

By.....

### PREVALENCE OF TYPHOID FEVER IN TAMPA

The first feature of their report to which attention is invited is the statement that "A conservative estimate of the cases of typhoid fever in Tampa during March and April would be from 100 to 200 cases." I have been unable to get a record of anything like this number. The records I have been able to obtain show 7 cases for February, 9 for March and 12 for April. Assuming that the February cases were all carried forward into April, we have only 28 accounted for. The deaths for March were 2, April 3 and May 2. Taking the deaths as a basis, it will be seen that the deaths for March and April, or for April and May, were only 5. Assuming that the mortality is about 12 per cent., this would give us some forty cases for the two months. So taking all the obtainable facts and putting them together, *I fail to find any evidence that the disease was so widespread as alleged.* It would seem to me that 25 to—at most—50 cases for the months of March and April would have been a very liberal estimate.

With this exaggerated estimate of the number of cases staring me in the face, I can proceed to the other features of the report with less trepidation.

#### CREAM

The next feature to be considered is found in Part VI, under the caption *Cream*. The statement is made that

"The daily consignment during the two latter periods were larger and though on some days they may have been sent to the local dealers in original packages, on other days they were mixed with the general supply of the Tampa Dairy Company, two-fifths of which went to the Belleview."

It is the above statement that I want to speak of, because it is this that enables the cream from this particular dairy in Tampa to get to the Belleview. And that statement is at variance with the information furnished me by Mr. Barritt and borne out by the office employees of the Tampa Dairy Co. It was the same Mr. Barritt who gave Dr. Irons his information. Mr. Barritt tells me that it was *not* their custom to mix the cream from Fisher's dairy with the regular supply, but on the contrary, it was their custom *not* to do it; and that if it ever was done he is unaware of it. While he cannot say positively that it never occurred, he confidently believes that such is the case. There are a number of circumstances that would bear this out. For example, The Belleview was that time one of the largest patrons of the Tampa Dairy Co., and it was the custom of the dairy to provide for their largest and best customers first, and from the regular supply that could be depended upon. Furthermore, they usually made up the shipment to Belleair in time to catch the early boat, which they could not have done had they not got the cream off before Mr. Fisher's delivery, which was usually late. Again, the maximum amount of cream received from Mr. Fisher on any one day was four gallons. At that time, Mr. Barritt informs me, he had in the vicinity of a dozen local patrons that took two to four gallons a day, and that it was his custom to supply the local customers with the cream that came in irregular quantities and at irregular intervals. Upon the whole, Mr. Barritt believes that he would be thoroughly within the bounds of truth if he were to say that *none of the cream from Fisher's dairy ever went to The Belleview*. He recognizes that there is the barest possibility that it might have occurred, but confidently believes

that it never did. Now, since it was necessary for this cream to get over to The Belleview in order to connect the infection with Tampa at all, it will be seen what a slender thread of evidence the whole case against the Tampa Dairy Co. hangs upon.

Nor does it stop there. If this obstacle were safely past and it were shown that the cream from the dairy in question did actually go to The Belleview, they would yet have to pass another that is still more stubborn. *For it has not been shown that the consumption of milk and cream from Fisher's Dairy has produced a single case of typhoid fever.* As we have seen in this report, there is not a particle of epidemiological evidence that milk has played any appreciable part in the typhoid prevalence in Tampa, and this in spite of the fact that Mr. Fisher's entire output, from a herd of sixty-eight, has been distributed there. Furthermore, at the time the Tampa Dairy Company was supplying The Belleview, it was also supplying the Tampa Bay Hotel and the DeSoto. And it did supply cream from Fisher's dairy to both these places. No case of typhoid fever is known, or suspected, to have been contracted at either hotel.

The evidence in support of the position taken by Drs. Jordan and Irons may be summarized as follows:

1. That certain guests of The Belleview developed typhoid fever.
2. That The Belleview got a portion of its cream from the Tampa Dairy Company.
3. That the Tampa Dairy Company got a very insignificant portion of its cream from W. A. Fisher.
4. That Fisher's dairy was in an unsanitary condition, and
5. That (possibly) some of Fisher's cream reached The Belleview Hotel.

The evidence against that being the source of the infection at The Belleview may be summarized as follows:

1. That (probably) none of Fisher's cream reached The Belleview.
2. That the Tampa Dairy is known to have supplied Fisher's cream to both the Tampa Bay Hotel and the DeSoto Hotel, and no case of typhoid is known or suspected to have originated in either.
3. The rest of Fisher's entire output from a herd of 68 was distributed in Tampa and consumed by the Tampa people, and yet



there is not a particle of evidence that milk has played any appreciable part in the typhoid situation in Tampa.

From all of which it would seem that the evidence to convict the Tampa Dairy is totally inadequate, and the fact of guilt highly improbable.

#### FLY INFECTION

Typhoid outbreaks have characteristics according to the source of the infection. A water infection is characterized by being explosive in character, covering the territory supplied with the infected water, and limited largely to that, and yielding suddenly to remedial measures directed thither. A milk infection is due to a typhoid carrier handling the milk, and the disease will follow the route of the dairy so infected. While a fly outbreak is more or less gradual in its onset, reaching its low mark during the months when flies are fewest, and its corresponding high mark when flies are most abundant.

There is no evidence that the water in Tampa has had any connection with the typhoid prevalence, nor is there any evidence that milk has played any appreciable part. But there is strong epidemiological evidence that the disease has been chiefly fly-borne. There are several things that bear this out. There are approximately fifty-four thousand people in Tampa. The central portion of this aggregate of human habitations is sewered. In the sewered portion about twenty-five thousand people live, while the remaining twenty-nine thousand live in the surrounding unsewered territory. In other words, there is a sewered city of twenty-five thousand people, surrounded by an unsewered city of twenty-nine thousand.

In the unsewered portion open closets are the rule. No attempt is made to make them fly-proof. Flies have easy access both to the privies and the homes—kitchens, dining rooms, bed rooms. Where these conditions prevail, they visit the privies and the homes alternately. They carry on their feet excreta from the privies to the pantries, tables and wherever they can find food spread or some one to worry with their attentions.

Wherever there is an open closet in the community there is danger, for sooner or later some one that has recently had typhoid fever and is still excreting typhoid bacilli will use that closet. And

then when the fly leaves the closet, instead of carrying on his feet just plain dirt, he may carry typhoid bacilli and distribute them in his wake, on the food prepared to eat, or wherever he may go.

Such is the risk attending a single open closet in the community! It matters not whether your own or your neighbor's. Flies do not confine themselves to any particular closet, or any particular dining room. Now, the greater the number of closets in any community the greater are the chances for infection to get spread—the greater the number of closets the greater the number of people using them, the greater are the chances for typhoid cases and carriers to use them, and the greater are the chances for the flies to get the infection and to spread it about. Thus it comes about that the larger the aggregation of people the higher the typhoid rate up to the point where sewage is properly disposed of, when the typhoid rate suddenly drops.

All this being so, you would then expect typhoid to be more thickly distributed in the non-sewered than in the sewered portion of the city. But such is not the case. It is pretty evenly distributed over the entire aggregate of population. The reason for this is not far to seek. The sewered portion of Tampa is not all connected up. There are a thousand open closets in the sewered territory. Acre for acre the number of water closets in the sewered portion is about one and one-half times as thick as in the non-sewered portion. This information was furnished me by the Sanitary Department. There is ample explanation for the typhoid fever being distributed in the sewered territory even as in the non-sewered.

#### ANALYSIS OF DATA, AND CONCLUSIONS

A general analysis of the data in hand forces me to the following conclusions:

1. That there have been 120 to 150 cases of typhoid fever in Tampa (including Ybor City and West Tampa) since the first of the year.
2. That the water has not been a causal factor in its spread.
3. That the epidemiological evidence would also exonerate the milk supply as having been an appreciable factor in its spread.
4. That all the available data point to fly infection.
5. That Tampa will of necessity continue to have a high ty-

phoid rate until provision is made against the fly having easy access to open privies.

6. That provision can be made against this by making the privies, or the compartment under the seat, fly-proof.

7. That with her commanding position and increasing importance as a manufacturing and commercial center, Tampa cannot afford to neglect or delay the institution of such measures as will look to the reduction of the typhoid rate.

#### A COMPARISON OF TYPHOID MORTALITY RATES

That these are not merely theoretical deductions will be seen by comparing the typhoid rate among cities that have put in fly-proof closets with those that have not, and the rate after the closets were made fly-proof with the rate before they were. For example, the typhoid rate in Jacksonville has been proverbially high for the last several years. Last year it was unusually high. This year the new ordinance requiring all open closets to be fly-proof is in full effect, and the rate has been lowered as compared with last year sixty per cent.\* The mortality rate has been cut exactly in half. There is every reason to believe that the chief factor in the typhoid reduction has been the installation of fly-proof closets.

Richmond had a very high death rate from typhoid for several years until she installed fly-proof closets, whereupon the death rate dropped very materially. Last year the deaths from typhoid in Richmond were only 28, with a population of 129,000. Tampa, as we have seen, had 13 during the first half of the year, and it is reasonable to count three more deaths from the June cases, which would make 16 deaths for the first half of the year, or about 32 for the year, with a population of only 54,000—a death rate nearly three times as great as that of Richmond. Can Tampa afford it?

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\*See appendix.

## PRELIMINARY REPORT ON LATENT MALARIA CARRIERS

BY

DR. HIRAM BYRD

Assistant State Health Officer of Florida



## PRELIMINARY REPORT ON LATENT MALARIA CARRIERS

BY DR. HIRAM BYRD

The writer has desired for several months to make a study of malaria in the state, based upon examination of apparently healthy children, for the presence of malarial parasites. Opportunity to begin presented itself last November when detailed to Sarasota in the interest of smallpox.

With the co-operation and assistance of Dr. Halton a hundred blood smears were made from children ranging from two to sixteen years old, either natives or those who had been in the state six months or longer. These were submitted to the laboratory for examination with result indicated in the table. It should be explained that after 76 of these smears were examined an accident in the laboratory "pied" the rest so that it could not be told which were white and which were colored. The table is therefore based upon 76 examinations, except that the total percentage is based upon 100 examinations.

The total percentage of infection was 12. But there was a striking difference between the white and the black, being in the former about three and a half per cent, and in the latter about thirty-seven and a half per cent. At Fort Pierce, these conditions were reversed, 24 negro examinations and 76 white giving zero for the negroes and about two and a half percent for the whites.

At Miami, Little River and Cocoanut Grove, only white children were examined, with the result that a little over five per cent were infected at Miami, while the other two places were zero.

This is as far as the inquiry has progressed.

From the meagerness of the work done, no definite conclusions can be drawn of course, but the following facts are apparent: 1. That persons in apparent health are to be found in Florida harboring malarial parasites. 2. That this applies to both white and colored races. 3. That such infected persons are irregularly distributed in the state, and even in the same locality.

The writer believes that this inquiry is worth pursuing further for the following reasons:

1. It is the only method yet suggested that will work out

in practice by which even an approximate idea of the malarial index of a community can be determined. A system of morbidity statistics, while greatly to be desired, is entirely out of reach with existing machinery. This will in a measure compensate for it by enabling us to determine the malarial index with a fair degree of accuracy.

2. It will enable those in particularly malarious localities to take special precautions against getting the infection themselves and also against infecting mosquitoes to pass the infection on to others.

3. It will enable the physician to more intelligently interpret laboratory findings. To illustrate just what is meant, suppose one of these malaria carriers should develop typhoid fever, which he might do at any time, and a blood specimen should be sent to the laboratory and the malarial organisms found, as they would be, the physician would be entirely thrown off his guard, and would be certain he was dealing with a case of malaria, when in fact he would have in hand a case of typhoid. Then to clinch the case suppose a specimen of the same patient's blood were submitted for agglutination and failed to respond, as they do in a certain number of cases, then the physician would assuredly feel that the laboratory had failed of its function.

4. It would bring to the attention of the laity the fact that persons in apparent health might be the means of infecting mosquitoes and spreading the disease, which of itself would have an educational value not to be reckoned lightly.

Later:—Oxford, DeLand and a series of teachers from DeSoto County have been added, making table as follows:

TABLE OF RESULTS

Place	White				Colored			
	No.	Pos.	Neg.	Per.Ct. Pos.	No.	Pos.	Neg.	Per Ct. Pos.
Sarasota -----	60	2	58	3.5	16	6	10	37.5
Miami -----	117	6	111	5.1	--	--	--	--
Little River -----	10	0	10	0	--	--	--	--
Cocoanut Grove -----	10	0	10	0	--	--	--	--
Fort Pierce -----	76	2	74	2.6	24	0	24	00.0
Oxford -----	45	3	42	6.6	--	--	--	--
DeLand -----	55	5	50	9.1	45	5	40	11.1
Arcadia -----	31	0	31	0	--	--	--	--
Total -----	404	18	386	4.4	85	11	74	7.7

## REPORT AND RECOMMENDATIONS OF THE COMMITTEE ON SANITATION AND PUBLIC HEALTH, APPOINTED IN 1910 BY THE STATE SUPERINTENDENT OF PUBLIC INSTRUCTION.

JACKSONVILLE, FLA., Dec. 27, 1911.

Hon. W. M. Holloway, State Supt. Public Instruction, Tallahassee, Florida.

Sir:—Your Committee on Sanitation and Public Health for the Schools of Florida, begs leave to make the following report:

1. Personnel: The Committee, as originally appointed, consisted of seven members, to which one was subsequently added, as follows: Dr. Hiram Byrd, (Chairman), Dr. Ellen Lowel Stevens, Dr. J. P. Hilburn, Dr. J. P. Colson, Dr. W. H. Tribble, Prof. W. S. Cawthorn, Dr. W. H. Russell, and Miss Hattie Carpenter.

2. Meetings: Owing to the fact that the committee is so large and so scattered over the state it is a difficult matter to get all together for a meeting. Only one meeting has been held and only three of the eight were present on that occasion. With this exception the business has been transacted by correspondence.

3. Instructions: Soon after the appointment of the committee, the chairman had a conference with the State Superintendent for the purpose of getting definite instructions as to what was desired and expected of the committee. It was instructed that there was no available funds upon which to operate, and consequently it was desired that the committee operate with existing machinery, that is without funds and without legislation. Further than this, it was left to its own resources as to what to do and how to do it.

4. Plan: At the meeting above alluded to, your committee undertook to get its bearings, for a definite study of the needs and possibilities of protecting and improving the health of the school children of the state.

5. Recommendations: After much study and some correspondence, your committee would recommend:

a. That "Medical Inspection of Schools" be defined as a systematic effort to protect or improve the health of any or all pupils. With this conception in mind we would recommend

b. That the time is ripe for the medical inspection of schools.



c. That the individual school, whether large or small, must of necessity be the unit of operation.

d. That medical inspection may be as complete or as partial as the individual school desires or can afford.

e. That it may be carried out either by the board of education, or the board of health. (This refers strictly to the local board of education and local board of health).

f. That it may be undertaken by any school in the state, however large, or however small.

g. That the larger schools can make it more thorough and complete than the smaller one; but

h. That no school is too small to introduce some definite systematic regime looking to some form of protection of the health of the pupils.

Note. In many schools, particularly in the rural districts, the most important public health problem is hookworm eradication. This can be accomplished by the teacher, pupils, and parents, without any further advice than they can get from the State Board of Health.

i. That where it can be afforded medical inspection should be carried out by the combined efforts of the teacher, the doctor and the nurse.

j. That where all three can't be afforded, by the teacher and doctor without the nurse.

k. That where a doctor can't be had, it can be carried on by the teacher.

Note. There is a considerable amount of work that the teacher can do without the assistance of a doctor. In Massachusetts the teachers examine the eyes of the pupils, not to determine what ails them, but to determine whether they are normal or abnormal. If any marked deviation from the normal is found, the pupil is referred to a physician.

l. This presupposes a certain amount of definite information of a more or less technical character, that in the ordinary course of events the teacher doesn't get, to which end we believe that the teachers should receive definite instructions as to how to conduct such examinations as may be deemed advisable.

m. That the meeting of the teachers in the several county institutes, and at the State Teachers Association, and the summer

normals, and the colleges, afford convenient fora from which the necessary instructions can be given.

n. That the State Board of Health is the logical body to undertake the instruction of the teachers for this work, hence we believe

o. That the immediate need is for the State Superintendent of Public Instruction, and the State Health Officer, to co-operate in providing for a course of demonstrations in all the summer normals and similarly in all the colleges which have normal departments, and

p. That these demonstrations shall cover such features as may be adjudged of vital importance by the State Health Officer and the State Superintendent of Public Instruction.

Respectfully submitted,

HIRAM BYRD,

*Chairman.*

# MEDICAL INSPECTION OF SCHOOLS

ADDRESS OF DR. HIRAM BYRD  
Chairman Committee on Public Health and Sanitation

Before the State Conference of Women's Clubs, at Jack-  
sonville, Fla., November 14th, 1911

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Publication 96, State Board of Health of Florida, June, 1912



## MEDICAL INSPECTION OF SCHOOLS.

BY DR. HIRAM BYRD.

*Ladies and Gentlemen:*

At a meeting of this kind, held two hundred years ago, we would have discussed mischievous sprites and elves and witches, as the cause of disease; and incantations, sorcery, and ceremonies as the remedies. We would have heard that Sir Kenelm Digby's sympathetic applied to the sword, would heal the wounded soldier; we would have heard that four or six big fat snakes put in a gallon of canary wine alive and left four to six months would make a medicine that would provoke to love and cure the small-pox; and a little later we would have heard that a certain German-American Doctor by the name of Cagliostro had discovered the truly elixir of life, that would change all metals into gold and keep people forever young.

In the days of the celebrated Divine, Cotton Mather, if we had had a meeting of this kind, every homely and eccentric old woman in the community would have been discussed, and dissected, and condemned and tortured into confession of witchcraft, and then burned at the stake because she had confessed.

Just one hundred and two years have now elapsed since the birth of the man who was destined to usher in a new era in learning—an era which was to abolish dogmatism and institute experiment; an era that was to ignore opinion however venerable with age it might be, and accept nothing but proof; an era that was to subject every item in the domain of human knowledge to the most exacting test that science could devise, and reject every particle that could not stand the test.

But while Darwin ushered in this new era, by rejecting the dogmas with which the world was teeming, and by inductive reasoning set up new standards of truth, and opened the way for the scientific study of biology, and himself coined the expression, "The struggle for existence," which is the nucleus around which all biological phenomena group themselves, he did not understand its full significance. He saw some three thousand species of animals, and some two hundred and fifty thousand species of plants all turned loose in the world together, all struggling with adverse conditions to maintain their own existence; plants struggling with

one another for soil, light, warmth, moisture; animals struggling with one another for food, place, supremacy; plants struggling with animals to keep from being eaten, animals struggling with plants to make them available for food; every one for self, having no care except to get all possible and turn it to its own account, and no fear except the fear of being used for food or otherwise consumed by some stronger, some more ingenious appetite.

And in that fierce struggle, how many animals, how many plants, must daily, hourly perish. How many blades of grass to feed a single caterpillar! How many caterpillars to feed a sparrow! How many beetles for a toad! How many toads for an adder! How many sparrows, toads, adders, to feed a single hawk!

Darwin saw in the struggle for existence, that slow but constant change that makes for new varieties, as the farmer by careful propagation can produce different varieties of corn, as the Cuban, the shoe peg, the Bitch; as the stock man by systematic breeding can produce from common cattle, the Hereford, the Short-horn, the Jersey. And as the propagation continued through the ages he saw the difference become greater and greater, the varieties diverge into species, as the dog, the wolf, the coyote, that came from a common ancestor; and he saw species diverge into genera, and on up through the scale—the struggle for existence weeding out the weaker, the survival of the fittest propagating the kind.

But while Darwin saw all this in the world of larger things, he never followed it into the domain of disease. That work was reserved for another. Where Darwin laid it down, his illustrious contemporary, Pasteur took it up, and demonstrated for the first time in the history of the world that what we know as disease, is nothing more or less than the phenomena of the struggle for existence; that the struggle is not confined to the higher animals or higher plants, but penetrates every part of the organic world, from the lion making food of the buffalo to the malarial parasite making food of the human blood; from the mistletoe penetrating the oak with its roots to the tubercle bacillus penetrating the human lungs. Darwin's observations had been confined to the world visible; Pasteur's keen mind took it on into the world invisible. And here he saw the struggle just as fierce as in the world of larger things. Saw that sickness is an accident—the result of

some smaller animal or plant trying to make a living, trying to get food and shelter—may be some coarse parasite, as the tapeworm in the intestine of the cow, or some smaller one, as the hookworm sucking the blood of the child, or it may be some still smaller worm as the trachina that embeds itself in the muscle of the pig and causes measly pork, or indeed the attacking parasite may even be too small to be seen without a microscope, as the malarial parasite in the human blood, or the tubercle bacillus in the lungs. Size makes no difference—the struggle is none the less fierce because one of the combatants happens to be microscopic in size. The objects of the combat are the same—the result the same as in the higher world.

I say it was Pasteur that extended our knowledge of biology into the lower world. He could not see it in all its fullness and richness at that early time, for he was the first to look. Much long and patient labor was to be performed before the basic principles were to be laid bare. Pasteur did much of the work himself, and showed how it could be done, and as if his call in behalf of humanity had been magic, a thousand laborers instantly responded and soon the dyke of ignorance and superstition that held the people in thrall since the beginning of the world, was broken and a flood of knowledge like a mighty torrent came rushing through, and sweeping on and on. Thought once awakened does not slumber again. It grows in man after man, generation after generation. And ever as it grows it becomes more and more democratic. At first only seen by the seers, truth at length becomes a household word, and little children see more danger in the house fly today,

"Than ever the sages  
Of the earlier ages saw."

So prompt was the response to his call that even during his life time, Pasteur saw that knowledge working like the ferment that he had discovered throughout the length and breadth of the land. First, physicians taking advantage of the fact that disease is a living process in the interest of their patients; then sanitarians taking advantage of it to prevent disease; and then everybody from one end of the earth to the other, waking from their lethargy and joining in the mad rush for less disease, better health, and more happiness. Witness the hundred and one or-



ganizations for the study and prevention of tuberculosis alone, the endowments for tuberculosis hospitals, the dispensaries, the prizes, the legislation, the international meetings, that this disease alone has called into existence! And then reflect that tuberculosis has not received more than its proportionate share of the study that has been done on the other major maladies that afflict mankind. That diphtheria, malaria, typhoid, cholera, plague, smallpox, pellagra, hookworm, infantile paralysis, have all been accorded attention according to their importance.

Early in the study of these several diseases, it was discerned that none of them could be successfully coped with except by intelligence—an intelligence of the highest order. That malaria was both a scourge and an enigma as long as the life struggle between the malarial parasite and its host was unknown—as long as it was unknown how the parasite managed to pass from host to host. The first successful management of malaria was after it was discovered that the mosquito serves as intermediate host for the parasite.

To combat disease successfully means that not only the physicians and health officers must have adequate knowledge of its cause and method of transmission, but that the entire population must likewise know the inmost secrets of the same that they might give their intelligent co-operation. Or to state it another way, we are engaged with our microscopic foes in a hand to hand struggle for existence—and whether we will better our condition, or be the easy prey that we have always been, depends upon whether we will enlist intelligence on our side. To state it still another way, public health is a matter of public education. And oh, that is such a tedious—such an eternal undertaking! To educate the public. To bring the rank and file to an appreciation of the things that we think are worth while! That is work, that is labor. For a hundred years we have known how to prevent smallpox, and yet nearly a hundred thousand people in the United States had the disease last year! For fifteen years we have known that malaria was transmitted solely by mosquitoes and yet some of our school physiologies even of to-day state that the disease may come from miasmatic effluvia—whatever that is. For fifteen years we have been harping on the life of the mosquito as a factor in the spread of malaria, and more recently of yellow fever, and how the insect breeds only in water, and yet we hear spasmodic

spurts and sputtering about the negligence of the health authorities because of weeds that are alleged to be breeding mosquitoes! Oh what a task when we undertake to educate the public.

So hopeless is it that it is now being recognized more and more that the point of attack must be the child and not the parent. That the place to educate the child is the public school. That it will take an army of educators, and these we have in the teachers of the country. That education along public health lines is only a part of the work of educating the child for its future usefulness and happiness.

When Pasteur made his famous discovery that the diseases of silkworm, known as pebrine and flacherie, were due to parasites, and were preventable, and then in rapid succession discovered the cause and method of prevention of chicken cholera, and anthrax, and swine erysipelas—discovered that they were all parasitic diseases, the world stood aghast and wondered. These new doctrines were so different from the things they had heard, that they were dazzled. Suddenly one, and then another caught the spirit—saw the light, and soon a thousand workers sprang through the gate he had opened, some to learn more of the new science, and some to pass the learning around that more and more might profit by the treasures that he had garnered. And round and round it was passed till the children were reached, and even in the life of that venerable sage, medical inspection of schools was established on the very spot where two centuries before the witches were burned. And from that small beginning in Boston seventeen years ago, the movement has spread to over a thousand cities in America, has spread to Canada, England, Scotland, Germany, even far Australia, and in some form or other has found anchorage in every enlightened nation on earth.

Wherever medical inspection of schools has been instituted, regardless of size of city, or amount of expenditure, regardless of the agencies employed in its execution, one thing has always figured as one of the first objects to be attained; namely the prevention of communicable disease. Other things vary in different locations but that is universal.

It must not be assumed for an instant though, that the methods employed for this are the same. They vary greatly. Just so the diseases to be prevented vary. Each country has its own public health problems. The far east has among its major problems,

plague and cholera. The West Indies, and tropical America has as its major problem, yellow fever. Africa has among the more important diseases sleeping sickness. The larger cities of the world are more infested with vermin and skin diseases; the country, with sewage-borne diseases.

And even the public problems of the same locality vary from year to year, from decade to decade. One year we will have an abundance of one communicable disease and another year another. One year we may have more diphtheria, another year more scarlatina, another more measles, or whooping cough.

Prior to 1898 plague was unknown in the United States. Then it got introduced into San Francisco and has been like a mine under the place ever since, while the eastern states have still enjoyed freedom from it.

If we of Florida had been discussing our major diseases twenty years ago, yellow fever would have had the foremost place, while to-day it would hardly get a passing mention, but we would hear of a new and fatal disease of rapidly increasing prevalence, known as pellagra. Ten years ago we would not have heard mentioned the hookworm, while to-day it stands in the scale of importance second to none.

So it is patent that all effort to prevent communicable disease must crystallize in accordance with the needs of the community.

The second object to be attained is the correction of physical defects. In the Borough of Manhattan, New York, 275,000 school children were examined and the astonishing fact revealed that something over 71 per cent. needed medical treatment in some form or other. 49 per cent. had defective teeth. We are not surprised then to find that 45 per cent. had diseased glands, 27 per cent. had enlarged tonsils, 16 per cent. had nasal growths, 15 per cent. had obstructed breathing, one out of five children had defective vision.

It is not likely that we have the same physical defects in this state to the same degree. In Ocala last year it was found that one out of eleven had defective vision, instead of one out of five. But, on the other hand, we have other defects just as serious to take their place. Indeed, we have a disease, common to tropical countries, quite as prevalent, and vastly more important, than any of those named. A disease that I hesitate much to discuss in this connection, because it has been in the lime light so long, but its

pre-eminent position in the scale of serious maladies will not permit us to pass it lightly by.

Let us pause here long enough to see if we can get the full import of this one disease.

White people suffer from it more than negroes.

Children suffer from it more than adults.

The rural population suffers from it more than the urban.

Our inquiry will be then to determine the cost in dollars and cents that hookworm disease entails upon our rural white children.

55 per cent. of our people are white. 70 per cent. of our people live in the country. Therefore 28 per cent. of our white school children live in the country.

A canvass was made by the State Board of Health covering six thousand rural school children and it was found that 52 per cent. of them were hookworm sufferers.

From which it is seen that 15 per cent. of the total school children of the state are suffering from hookworms.

The extent to which the sufferer's vitality is lowered varies. But it can be measured with a fair degree of accuracy by the color of the blood. That is to say, rich, healthy deep red blood is indexed at 100. The hookworm sufferer's blood becomes pale and watery in proportion to his infection. And as the infection gets worse and worse the color index of the blood runs down and down, 90, 80, 60, and even to 20 per cent. of the normal. Perhaps an average color would be 70 per cent. But, to be especially conservative, we will assume that it is not so low as that. We will assume that it is 80 per cent. That means that the sufferer is off 20 per cent. in strength, 20 per cent. in intellectual energy, 20 per cent. in power of learning.

Now if 15 per cent. of our school children are off 20 per cent. in power of development, that lowers the whole power of development of the school children of the state by three per cent.

We expend upon our public education now about two million dollars a year. Three per cent. of two million dollars is sixty thousand dollars.

Are these figures facts? Verify them for yourselves. Sixty thousand dollars of our all too scant educational fund wasted annually—literally devoted to the maintenance of hookworms. Sixty thousand dollars for hookworms, and we haven't taken into account any of the negro population. Sixty thousand dollars' loss, and



we haven't taken into account any children under or over school age. Sixty thousand dollars' loss annually, and we have left out of consideration all the people of the cities and towns with a population of over one thousand, and aggregating 30 per cent. of our entire population.

Remember, now, that sixty thousand dollars represents only a part of the loss from a single disease; and remember that every disease represents a distinct money loss, some greater, some less, but in all cases a loss; and remember that all the loss represented by disease would be saved by curing and by preventing the diseases, and then stop and ask yourself—Don't ask yourself if you can afford to have medical inspection of schools, but ask yourself if you can afford *not to have it*.

The third object to be attained is the education of the public. And this is the most important of the three, for, after all, conservation of the public health is a matter of education pure and simple. What the children are taught to-day represents the greater part of what the men and women of to-morrow will know. And they can never be taught by simply telling them how. They must be shown. It is an aphorism in educational circles that we learn to do by doing. We learn to prevent sickness by putting into operation the measures that will prevent it. We learn to correct physical defects by correcting them. We have had agricultural schools for years, many years, but it was only recently that agriculture was actually introduced into them. The corn clubs of to-day will teach more agriculture in a year than the agricultural school would ever teach without it. It is learning to do by doing. So it is with the public health. If we would conserve it, we must teach our people how, and we must teach them how to do it by doing it.

With this method we don't have to wait till the next generation for results. The children learn now and so do the parents. There is no more effective way of disseminating general sanitary information than through the schools. This, again, the corn clubs have verified. Boys have joined the clubs and have taught the fathers things that they couldn't have been taught in any other way.

The forces employed in medical inspection of schools will of necessity vary according to the density of the population, the available funds, and the spirit of the populace. In the larger cities, where the matter is taken up, as London, New York, Boston,

Glasgow, Frankfort-on-Main, and so on, an adequate corps of physicians and nurses is employed, which, together with provision for dental clinics, constitute a complete system of medical supervision. But smaller places have to be content with less. The nurse may be dispensed with, and in the still smaller, where available funds become an object, the services of the physician and dentist may be placed upon a gratuitous basis. In over 75 cities in the United States having medical inspection of school children, the doctors receive no compensation.

But the most important factor in medical inspection of schools is the teacher. And this is true even where doctors and nurses are available. Not that the teacher does or can displace either the doctor or nurse—that cannot be done, but that the teacher is an indispensable adjunct, and can do much, even where there is neither doctor nor nurse. In London, where the scheme has been developed largely after the ideas of Dr. Kerr, who is probably the foremost thinker of the time along these lines, the greater part of the responsibility for the control of communicable diseases rests upon the teacher. To outline this responsibility a little better, the teachers keep on the alert for cases of communicable disease, and as soon as they suspect a case it is reported to the school physician or nurse, as the case may be. In other words, the teacher doesn't undertake to make a diagnosis of measles or scarlet fever or diphtheria, but does undertake to determine whether a child is sick or well, and if sick it is reported to the doctor. So important a factor is the teacher in medical inspection of schools that even the work of testing the eyes is done by the teacher in Massachusetts, and the results are reported as being satisfactory. Here, again, the teacher does not undertake to make a diagnosis of eye troubles. She only undertakes to determine whether the eyes are normal or defective, and if anything is found to be wrong, the student is referred to an eye specialist at once. There is no attempt on the part of the teacher to do more than determine whether the eyes of the child need examination by an eye specialist.

In this state the teachers have, I might say, unconsciously taken up medical inspection of school children to the extent of suspecting hookworm infection here and there and referring them to the family physician and the State Board of Health, and tuberculosis in school is frequently taken cognizance of by the teacher and advice sought, and the same thing might be said of sore eyes,

and ring worm, and smallpox, so that little by little a system of medical inspection is growing up under the impulse of necessity. In one of the larger schools last year, not the mentally defective, but simply the duller pupils, were all taken from the entire school and put into a single room and managed as an ungraded school, with very satisfactory results.

In this connection it is pertinent that I should outline what experience has taught is the line of least resistance in bringing it to pass.

First of all, legislation authorizing it. In the case of Boards of Health taking it up, they usually have sufficient legislation to insinuate it in.

And fortunately it happens that in this state the educational law is wide enough in its wording and meaning that whenever a school board wants to devote a part of the school fund to looking after the physical needs of the school and school children, it can do it. So that the need for additional legislation is at once disposed of. The existing machinery is all sufficient.

Next is some one to take the initiative. It may be the Womans Club; and there are some forty Womans Clubs in the state federation, and no one knows how many that are not. It might be the Womans School Improvement Association. There are something like 150 such organizations in the state, whose excuse for existence is what the name implies. Or it might be the local Board of Health, as in Jacksonville; or the local board of education, or, indeed, the principal of a school, as in Madison and many other places. It is not practicable for a State Board of Health, or a state board of education, to more than make provision for it—it cannot be executed upon a state-wide scale. Even in Massachusetts, where provision is made for it for the entire state, its institution and execution depend upon the local authorities.

And the same is true in Scotland, Australia, everywhere. The State Board of Health or the state board of education can make provision for it, can make it possible, but the local authorities must bring it to pass.

Summed up, or boiled down, then, any school in the state that wants medical inspection can have it—the thing required is the necessary effort to bring it about.

It is easier to bring it about in the larger places than in the smaller ones, and, other things equal, medical inspection will first

take shape in the larger cities of the state, and from these it will gradually work its way down through the towns of smaller and smaller magnitude. And once it is started there is reason to believe that it will so justify its existence that it will go on down and down, till even the smallest aggregate of pupils will eventually undergo some form of medical inspection.

In like manner the medical inspection will be more thorough in the larger places, certain features being dropped off as the smaller and smaller places are reached, till only the most essential phases will be retained in the smallest aggregates.

And it might with safety be added that as time passes medical inspection will come to be more and more simplified, and *pari passu* more and more complete in any given community, and at the same time the smaller place will come to be larger, so that the institution will be an ever growing one toward perfection and usefulness.

If I read the signs of the times aright, medical inspection of schools is not only coming, but is already here, and here to stay. It is based upon the eternal principles of progress, and, like the Chinese revolution, is gathering momentum as it goes. At first, disorderly, perhaps, its energies will not always be expended to best advantage; and here and there it will encounter royalists, who do not believe in it; but ever and anon it can point with pride to the things already accomplished that more than justify its existence, as in London, for example, where ringworm was so common that a ringworm school was established, but had to be closed after three years for lack of pupils; as in Bradford where schools are conducted in open air for children of tuberculous tendencies; as in Madison, Fla., where the prevalence of hookworm disease has been reduced during the last eight years to the point where it is all but eradicated.

It is to the eternal credit of the Womans Clubs that they are devoting their energies to such worthy objects. If ever woman suffrage comes to pass, it will be brought about, not by fanatics exhibiting themselves as suffragettes, but by the eloquent, the silent appeal of the good women of the country who demonstrate their ability to discern and to do.



## INSTRUCTIONS TO REPRESENTATIVES OF THE STATE BOARD OF HEALTH.

EXECUTIVE OFFICE STATE BOARD OF HEALTH OF FLORIDA  
CIRCULAR 46 REVISED MARCH 1912.

As representative of the State Board of Health, and Health Officer, in and for the county for which you have been appointed, it is expected that:

1st. You will keep yourself and the State Board of Health well informed of the general health and sanitary conditions of the different sections of your county.

2d. You will do all you can to aid and promote the cause of public health in your county.

3d. You will be the State Board's representative and as such to you will be referred matters of local interest demanding investigation and remedy.

4th. You will exert your influence towards having the Rules and Regulations of the State Board of Health observed, and it is reasonable to expect that you will exercise this requirement.

5th. You will endeavor to personally encourage a sentiment in favor of vaccination and re-vaccination against smallpox, of the inhabitants of your section, particularly school children and factory operatives, for vaccination is the only preventive of smallpox.

6th. The State Board of Health will expect from you as often, and in as full and detailed a manner as possible, a report on the general health, sanitary necessities, hygienic conditions and like matters, bearing on the public health of your county; and especially so at the end of each year.

7th. In the case of any reports of suspicious communicable sickness, you will at once investigate the same, and if found to be smallpox, yellow fever or cholera, a report shall be made to the State Health Officer by telegram, charges collect; in all other communicable diseases, reports shall be made by mail; or if made by telegraph, the charges shall be prepaid. The Statutes do not authorize the Board to pay telegraph charges for reports of diseases except as specified above. The patient, if necessary, shall be isolated, and the disease managed in accordance with the Rules and Regulations of the State Board of Health.

The State Board of Health, under the statutes, can only pay for the care of those indigent patients suffering from smallpox

which have been reported to the State Health Officer and which professional care has thereupon been authorized by the state Health Officer; and in such cases the Board will pay a per diem of five dollars for your professional services, or a proportion of that amount for fractional days. When rendering bills for such services Form 221 of the Board should be used and strictly followed in all its details. Unless these requirements are complied with, the Board can make no payment for services nor reimbursements for expenses incurred. It will be found that the form referred to has upon it a Certificate of Claims to be signed by you when rendering your bill for services. This may seem rather strict upon a professional man, but it is not a strict requirement between an officer in charge of work of the Board and the State Health Officer in charge of the disbursement of state funds. It is a matter of business and is required by the State Comptroller and advised by the Attorney of the State Board of Health.

Therefore, at the time you report an initial case of a communicable disease, especially smallpox, you should state whether or not you are willing, in accordance with these instructions, to take charge of the situation. If unwilling, and it is not feasible for the State Health Officer to detail one of the field staff of the Board, and if the situation is serious, other arrangements will have to be made for representation at the time.

The desirable qualities in a health officer are firmness, decision, self-possession and good judgment, and these, if linked with kindness, attention and carefulness in detail of work, can never fail to inspire confidence, without which a health officer's work will be barren of good results. "Give every man thine ear, but few thy voice," is as excellent advice to a health officer as it was to the son of Polonius. Pay respectful attention to all complaints and listen to all rumors, but be slow to make decision, carefully and calmly weighing all facts. In times of suspicious sickness, at home or abroad, maintain a cool head and calm deportment. Do not yourself, and discourage in your associates in health matters any inclination to, indulge in mysterious nods, whisperings and secret meetings. Such a course inspires distrust instead of confidence, and alarms the timid and nervous. Be frank, truthful and candid with the people and they will show their appreciation of your acts by evincing additional confidence and faith in your ability and authority, and by attending to their business cares, thus per-

mitting you to discharge yours without annoying and harassing suggestions.

Sanitation and hygiene being the co-partners of education, it is necessary, therefore, that the health officer should be a teacher in this line. Every opportunity should be embraced by you to impress the public and its servants, county officials and the town council with the necessity for cleanliness in cities and benefits to individuals and communities always resulting from the observance of hygienic and sanitary laws.

Respectfully,  
JOSEPH Y. PORTER,  
*State Health Officer.*



EXCERPTS FROM THE 1911 ANNUAL REPORT OF THE CITY BOARD  
OF HEALTH OF JACKSONVILLE, FLA.

DR. CHARLES E. TERRY, CITY HEALTH OFFICER

**RABIES**

There has occurred in this city, during the past year, an epidemic of rabies among animals. During the fall and winter of 1910 cases were reported throughout the state, but not until February, 1911, were any cases known to have developed in this city. These earliest cases were reported to the State Board of Health office about the middle of February. A white child, Albert Miller, was bitten by a stray dog and, in about five weeks, developed rabies and died March 16th. The diagnosis was verified on autopsy by Dr. H. Hanson, State Bacteriologist, and inoculation experiments performed by him, with material from this child's brain, developed the disease in two rabbits.

Active measures were at once instituted by this department and during March fifteen heads of animals (14 dogs and one monkey) were submitted to the State Laboratory for examination. Thirteen were reported positive and two negative. The existing muzzling ordinance was found to be totally inadequate to the necessity of the occasion and on March 21st the City Council passed Ordinance K-92 "To Regulate and Suppress the Running at Large of Dogs." Following the passage of this ordinance, a large number of dogs were killed and impounded by the City Marshal, his deputies and the Police Department. April showed four positive heads, four doubtful and four negative. About 2,000 dogs, mostly wandering curs, were disposed of during this period. At this time an unfortunate accident occurred, a negro was wounded by a policeman while the latter was trying to kill a dog. This put an end to the shooting of dogs on the streets. The effects of the crusade of extermination were seen, however, in May and June, with only two and three positive heads, respectively. Here again an interruption, in the shape of a municipal election, occurred and the City Marshal lost interest in rabies while searching for votes. The result is shown by six positive heads in July and nine in August. Throughout this epidemic, despite the fact that the public was kept informed of the exact conditions, and in open disregard of the muzzling ordinance, a muzzle has been an uncommon sight, the large majority of all dogs being permitted to run at large unhampered. The result of this negligence on the part of those whose duty it is to enforce this ordinance is shown in detail in Table No. 2.

TABLE NO. 2

*Animals Reported Rabid and Heads Sent to State Laboratory for Examination*  
1911

Months	Posi- tive	Nega- tive	Doubt- ful	Total	Curs	Well- bred	Pers's Bitten	Animls Bitten
January	0	0	0	0	0	0	0	0
February*	1	0	0	1	1	0	4	0
March	13	2	0	15	15	0	8	12
April	4	4	4	12	10	2	8	0
May	2	2	2	6	3	3	5	0
June	3	2	0	5	3	2	3	4
July	6	2	0	8	4	4	5	1
August	9	0	0	9	4	5	7	4
September	9	1	1	11	6	5	6	4
October	5	3	0	8	2	6	4	5
November	2	0	0	2	0	2	0	0
December	4	4	0	8	2	6	8	0
Totals	58	20	7	85	50	35	58	30

\*Note—Four other cases reached the State Laboratory in February but did not pass through this office and are not included in this table.

Three deaths from rabies have occurred during the year among human beings, two white and one colored, while seventy-five individuals have been obliged to submit to the discomforts and expense of the Pasteur treatment. This treatment has been furnished by the State Board of Health free to indigent cases and at cost to those able to pay.

A short summary may serve to bring out more forcibly some features of the epidemic not shown in the table.

Animals which have bitten human beings quarantined and under observation for ten days .....	59
Animals known to have been bitten by rabid animals killed.....	65
Pasteur treatment furnished free to residents of Jacksonville by State Board of Health .....	60
Pasteur treatments administered free at this office.....	9
Pasteur treatments administered free by Dr. Day, City Physician.....	11
Total Pasteur treatments administered free by city .....	20
Pasteur treatments administered by family physicians .....	55
Total treatments administered in Jacksonville .....	75
Total cost of Pasteur treatments to State Board of Health and to patients able to pay .....	\$1,612.50
Estimated cost to patients for administration when treated by family physician .....	\$1,100.00

Entirely aside from the three lives needlessly sacrificed, from the anguish of mind of those bitten; from the pain, inconvenience and loss of time necessitated by the taking of the Pasteur treatment, the expense alone, borne by the state and the individuals bitten, would appear sufficient to indicate the necessity of a strict enforcement of the dog ordinance. It seems, however, that there are individuals, some private, some official and some editorial, in this community, who, rather than cause their dogs the inconvenience of a muzzle, prefer to see this inexcusable epidemic

continue and their children exposed to the horrors of a death from rabies or the needless pain of a hypodermic injection daily for three weeks.

The routine of this department throughout the epidemic has been, where an animal has been reported to be acting suspiciously, or to have bitten any person, to kill it if symptoms were well developed or, if a clinical diagnosis could not be made, to quarantine it until all uncertainty was over and then submit the head to the State Laboratory for examination. When the case was first visited a careful inquiry was made as to all persons or animals bitten, details as to location of bite, history and symptoms and an accurate description of the animal in question. This information has enabled us in several instances to identify a dog subsequently as one which had bitten some person not known to us at the time and who, but for our information, would have remained ignorant of the dog's malady and unprotected by treatment. In every case reported by the State Laboratory as positive or doubtful and in a few instances where, after biting some person the dog escaped, we have urged those bitten to take the treatment.

One adult refused to take treatment at first, not believing that the dog which had bitten him had rabies. His own dog, also bitten, died after a short incubation. Six days after the bite, located on the forehead, he began treatment and on the day he received the eighteenth dose, he developed symptoms and died in three days. This particular infection seemed to be especially virulent, as a large bull dog bitten by the same dog that infected this patient died with the furious type of the disease within thirty hours of the development of the first symptoms.

A glance at Table No. 2, which contains all the cases handled by this department where the animals were killed and their heads examined, shows a rather large number of positive heads to the number brought in. The disease seems to have been, during the early months of the epidemic, distributed among the street curs, but as these were killed off during the crusade mentioned, well-bred dogs became infected and the latter preponderate during the last months of the year. It would seem that the wandering mongrel is especially dangerous during the prevalence of an epidemic of this nature. A total of 3,551 dogs have been killed by the Marshal and his deputies but the epidemic still continues at the present writing (January).

I wish here to express my sincere appreciation of the assistance of T. J. Mahaffy, D. V. M., during this epidemic. The many visits that he has willingly made with me to suspected cases and the confining of such cases in his hospital has solved not a few difficult problems for this Department. His interest in the matter and his experience with the disease have been of the greatest value to me.

### TYPHOID FEVER

(Jacksonville, Fla., 1911.)

The number of deaths from this disease were less in 1911 than for any similar period for the past four years. Prior to 1907 our records are



not available. During 1911 there were 40 deaths from typhoid against 62 in 1910, a reduction of 22 or 35 per cent. This gives us a typhoid death rate of 62.85 for 1911 against 106.3 for 1910. I realize that this is not low but in view of the high typhoid death rate of 1910 and previous years our methods of sewage disposal and certain other insanitary conditions which exist in this city, I feel that the Department may be justly gratified with the reduction.

There were reported during 1911, 158 cases of typhoid against 329 in 1910. Of these 158, 70 originated in the city and 88 were imported. In determining this point, only those which developed active symptoms within one week after coming to the city were classed as imported. The number of cases contracting the disease here would, in all probability, be smaller were the actual facts known.

Of the 40 deaths that have occurred from this disease, 25 were cases that had acquired the disease elsewhere, only 15 of the decedents acquiring it in Jacksonville.

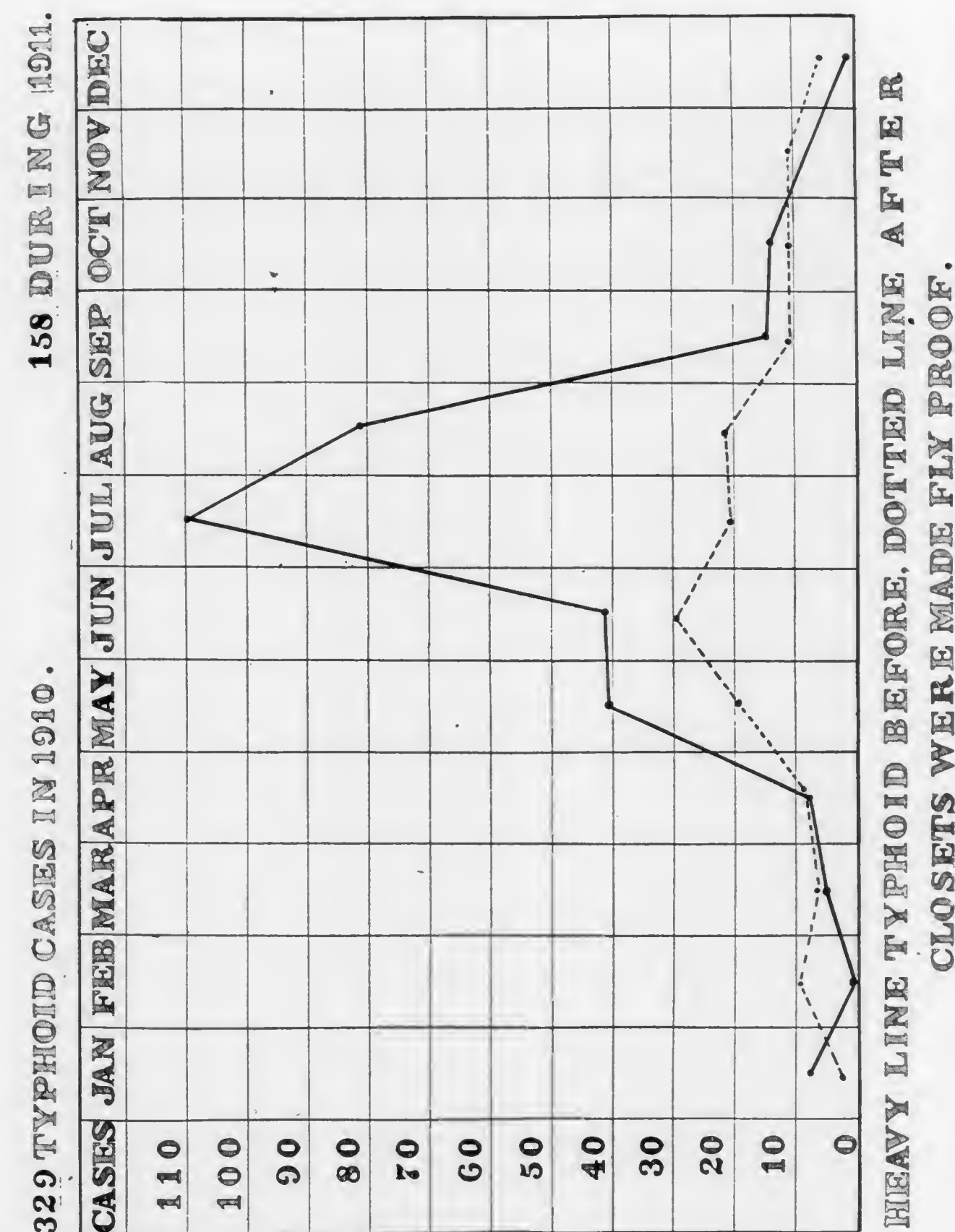
Of all deaths, 27 were white and 13 colored. The case fatality among the whites was 18 per cent. and among the colored 81.2, only 16 colored cases being reported. This colored case mortality is manifestly absurd, but is easily explained. The disease has been of a mild type for the most part and a large proportion of the colored cases have gone through the entire course without any medical attention or possibly but one or two visits from a physician. In these cases no diagnosis was ever made. There is also, undoubtedly, a considerable percentage of cases which were treated by the more ignorant class of colored physicians and which also passed unrecognized, labeled instead "malaria" or "continued fever." It is entirely impossible to obtain a full or correct report from the colored cases in this, as in other diseases, and, where practically one half of the population is composed of negroes, the task of a health department is rendered as difficult in the keeping of accurate records as in the actual work of health protection.

I have already touched upon this matter several times in this report but, in the consideration, especially, of preventable disease, do the difficulties of dealing with this portion of our population appear most discouraging, for, to the usual obstacles encountered in all public health work, are added the ignorance, indifference and willful opposition of this colored half of our citizens.

Notwithstanding the incompleteness of our case reports, we may, for purposes of comparison, quite safely use them, as they are more complete than those of 1910. This reduction of 171 cases and 22 deaths in typhoid I attribute in very large measure to the passage and enforcement of Ordinance K-54, regulating the construction and maintenance of dry closets.

This ordinance required the rendering fly-proof of all dry closets within the city. It was passed by the City Council on August 2, 1910, upon the earnest solicitation of this Department. A careful study of the 329 cases of typhoid reported during 1910, with reference to possible sources

of infection, convinced us that the large majority of cases were due to the combination of wide open privies and fly carriage. I will not review all the steps of this work as they are contained in the report of this Department for that year. It is sufficient to say that there were, approximately, 25,000 people using open privies and that these privies were distributed in every section of the city so that, even those having sewer connection themselves, were not immune to fly infection from nearby privies.



The typhoid curve that year followed so closely the fly curve, that, in connection with the facts already given, our conclusions seemed the

only reasonable means of accounting for the prevalence of the disease. On page 10 of the annual report for 1910, in connection with the work of reconstruction of privies already well started, occurs this sentence: "It is hoped that by the first of March the work will be practically completed and with its completion we expect to see a decrease in the prevalence of typhoid during the coming summer."

By the beginning of the fly season of this year, (the first of March), 80 to 85 per cent of these privies had been rendered fly-proof. The ordinance was enforced as rapidly as possible, no effort being spared to render its operation general, and by July or August comparatively few insanitary privies remained. The accompanying chart shows graphically the results. The heavy line indicates the typhoid cases, by months, as reported to this Department during 1910, the dotted line the cases reported in 1911.

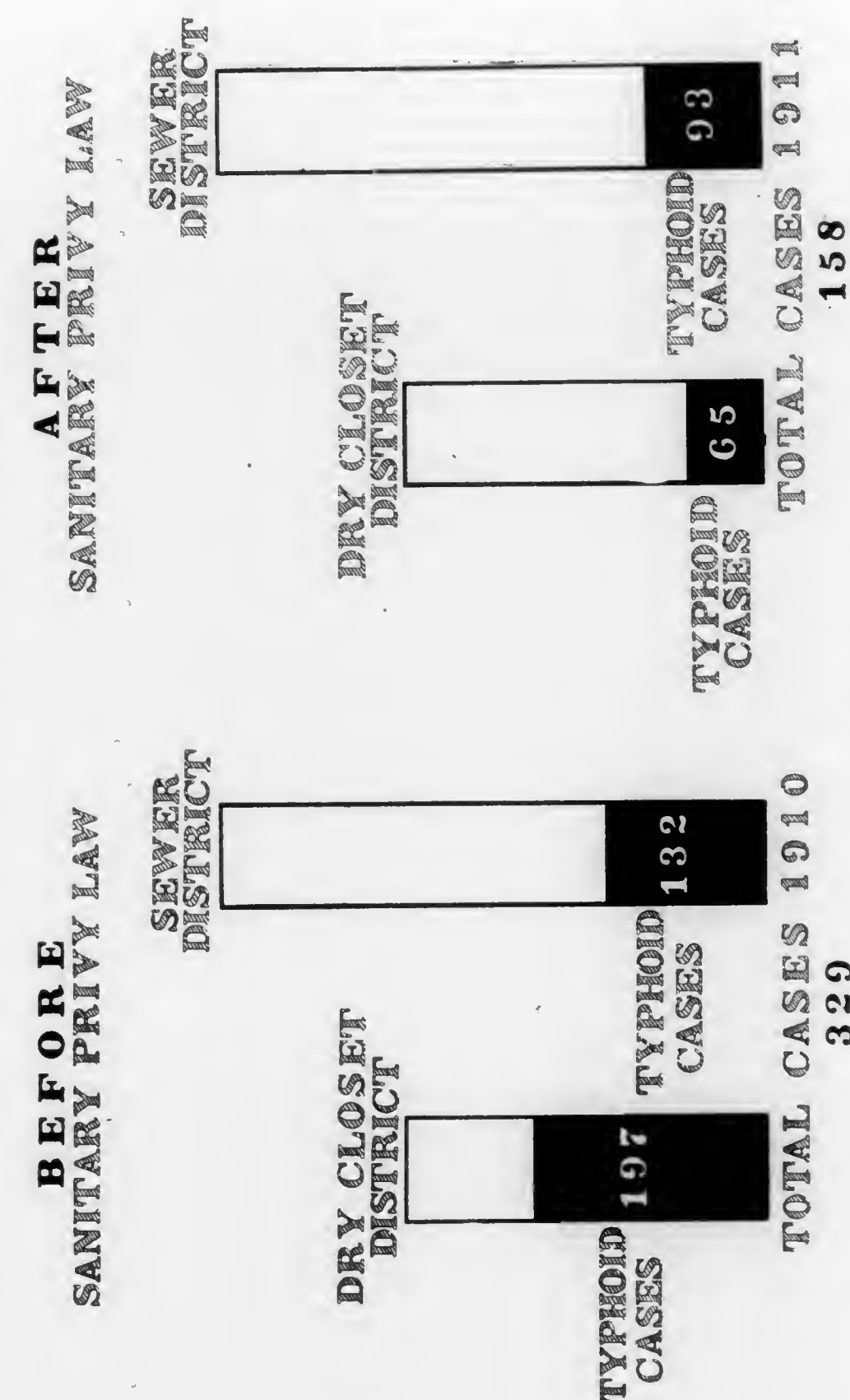
Together with the rendering fly-proof of the privies, each case, as reported, has been visited by an inspector and careful directions given as to the disposition of discharges, disinfection of linen and utensils and the dangers of carrier cases. This has been supplemented by printed instructions left with each case. In addition we have required that the sick room, in every case of typhoid, be screened and the flies found in it destroyed. Where poverty made this a hardship, this Department has furnished mosquito netting, disinfectants, fly paper, etc. These cases are visited every other day until convalescence, to make sure our orders are carried out.

A comparison of the distribution of the cases originating in this city during 1910 and 1911 is interesting. During 1910, 60 per cent of all the cases of typhoid were distributed in the dry closet district, forty per cent in the sewer districts, in spite of the fact that the sewer district comprises considerably over one-half of our population. During 1911 this distribution has almost been reversed, 41 per cent of the cases occurring in the dry closet district against 59 per cent in the sewer district. This latter distribution places the typhoid cases very nearly according to the population as a whole, regardless of methods of sewage disposal. On the following page this is shown diagrammatically. The only change in sanitary provisions which has occurred, in the city as a whole, since the bulk of the cases of 1910, is the rendering fly-proof of the dry closets.

A further study of the cases of 1911 show that of the 70 originating in Jacksonville 63 used city water, 7 pump water. Reference to the report of the Bacteriologist will show that the water supply has, at no time, given evidence of sewage contamination. The milk supply likewise seems to bear no relation to any of the cases in Jacksonville. Only 9 per cent of these cases used any cow's milk before their illness and no dairy has been under suspicion. Of the 88 imported cases 30 were brought in from the immediate vicinity of Jacksonville, from small settlements a short distance beyond the city limits. In all of these settlements open privies are used and in each of them typhoid has been continuously epidemic. 38 cases were brought in from distant points in the state and 20 from other states. The state as a whole had its annual share of typhoid. In review, it will be seen that practically all of the preventive work done by this Department

against typhoid fever has been directed against the fly and it would appear, in spite of the lack of strictly scientific proof, that it has had a very direct bearing upon the reduction of morbidity and mortality from this disease.

**TYPHOID CASES DISTRIBUTED BY METHODS  
OF SEWAGE DISPOSAL.**



In spite of the fact that such gratifying results have been obtained, by the rendering fly-proof of these privies, the fact must not be lost sight of, that it is a temporary expedient and will give but temporary relief. It is impossible to keep these places constantly in repair. They are used, for the most part by a class of people who look with ridicule upon the



necessity of care in the disposition of human excrement, or those too indifferent to matters of public import to observe more than the naked letter of the law.

Until this city is completely sewerred, we may look for an undue prevalence of typhoid fever and other intestinal diseases. Our most crying need is a rapid extension of our sewerage system. A privy is an abomination in a modern city and its accompaniment of intestinal diseases a grave reflection on the sanitation of any community.

While, as will be seen in the report of the plumbing inspector, 539 privies have been replaced by water closets, yet 616 new buildings have been erected during 1911 that could not be connected with sewers. The sewerage extension work is not keeping pace with the rapid growth of the city.

Of the recent issue of \$250,000.00 worth of bonds, one-half of that provided for by the last State Legislature, \$195,000.00 have been apportioned for sewers and drains. This amount, will, if expended where most needed, replace a great many privies with sewer connections, but it is hoped that of the balance of \$250,000.00 soon to be available by bond issue, an even greater proportion will be devoted to sewerage extension. Well paved streets serve an admirable purpose and parks and similar public improvements have their place in every municipality but the system of sewage disposal of a community means life or death to its citizens and good or ill-repute abroad.

#### SOME FLY INVESTIGATIONS

Inasmuch as scientific research is bringing forth, each year, additional evidence of the dangers of the house fly to the public health; and, especially, in view of the role we feel the fly has been shown to have played in the dissemination of typhoid fever in Jacksonville in past years, we have made some investigations of the various fly-breeding places in the city, with a view, if possible, to suggesting some means of limiting the prevalence of this insect. We have endeavored, as far as possible, to cover all the major fly-breeding places. The inspection has been productive of information we had not anticipated, and while I have hesitated to incorporate it in full in this report, on account of its length, yet I feel that it is a matter that bears close relation to the public health and therefore should be given in detail.

The objects of the inspection were:

1. To discover what conditions appear to be responsible for the breeding of flies in the city.
2. To ascertain the actual number of stables in the city harboring one or more horses or mules.
3. To determine what part, if any, is played by these stables as fly-breeding places.
4. To discover in what measure the construction and maintainance of stables affects their fly-breeding possibilities.
5. With a view, if it be deemed advisable, to the framing and passage

of a new ordinance intended to eliminate as far as possible the fly-breeding and other insanitary features of the horse stables.

6. To discover what relation places such as privies, garbage dumps, etc., bear to fly-breeding.

The information sought in the preliminary general inspection was the location of all horse stables and the material composing their floors. This inspection was carried on simultaneously by the patrolmen on all the districts of the city. The results were:

Stables having dirt floors .....	944
Stables having wood floors .....	136
Stables having cement or brick floors .....	16

Total stables reported .....1,096

This general inspection was followed by another made by one man of a certain number of stables in every section of the city. In this inspection, the information sought in each case was intended to show what proportion of stables were breeding flies and what features in their construction and maintainance seemed most favorable or unfavorable to this condition, i. e. fly breeding.

#### DETAILS OF INSPECTION OF DIRT FLOOR STABLES

In 113 dirt floor stables, the information gathered by this inspector related to the degree of prevalence of flies; the presence or absence of larvae and pupae in the floors; the condition of the ground in the stalls, hard, soft, wet or dry; whether manure was in a loose pile or in a container covered or uncovered; the presence or absence of flies in the manure or in the ground under the pile or container; whether or not there was any other fly breeding place on the premises in question and general cleanliness of stables.

The following facts were elicited:

Larvæ or pupæ were found in the floors in .....	79
Floors free from larvæ or pupæ .....	34
In those floors free from larvæ there were chickens scratching in .....	15.
In the remainder free from larvæ, 19, the stables had just been cleaned and the top soil replaced by dry sand.	

All the dirt floor stables where chickens were not present, and which had not been thoroughly cleaned just prior to the inspection showed the presence of larvæ or pupæ.

In many instances where larvæ or pupæ were found, the stalls appeared to be clean, that is there was no evidence of manure or bedding, the latter having been swept up, but the larvae were found at a depth of from one to three inches. In all cases, and in every case the ground was searched to a depth of six inches.

The character of the ground which seemed from this inspection to especially favor the development of larvæ was soft, wet ground. They were in no instance found in dry, hard ground, whereas pupae abounded in the dry portions of those stalls which contained larvæ where the ground was soft and moist from the admixture of urine.

In the 19 stables where no larvae were found on the first inspection and where chickens were absent, a second inspection was made ten days later. This subsequent inspection showed larvae present in 13 stables and absent in 6 which had again been thoroughly cleaned just prior to the inspection.

As already stated, these 113 stables with dirt floors were a fair average of such stables well distributed throughout the city and the findings may safely be taken as indicative of conditions existing in all such stables in Jacksonville.

#### CONCLUSIONS—DIRT FLOOR STABLES

1. 94 per cent of dirt floor stables where chickens were absent showed the presence of larvæ or pupæ.
2. Between seven and eight per cent of the stables inspected contained no larvæ owing to the presence of chickens.
3. There are in the city 817 dirt floor stables breeding flies throughout the season, except for an occasional period of a few days when the top soil of the stall is removed to a depth of three to four inches and replaced by clean sand. In the large majority of cases this is *never* done.
4. Simple removal of the manure and litter from the surface of a dirt floor stall in no wise affects its fly-breeding activities.
5. Chickens, when present in sufficient numbers and allowed the run of the stables, seem to pretty effectually prevent fly breeding in the dirt floor stalls, by feeding on the larvæ and pupæ.
6. The moisture and decomposing animal and vegetable matter found in dirt floor stables are entirely suited to the breeding of flies and are unavoidable in a floor of this construction where drainage of liquid waste is made impossible by the absorbent nature of the floor.
7. The infrequency of manure piles where the stable have dirt floors, as compared with the premises maintaining wood floor stables, seems to be due to the fact that all the filth is left in the stalls until its accumulation is such as to warrant the hiring of a wagon to haul it off. The appearance of many of these places corroborates this assumption.

#### DETAILS OF INSPECTION OF WOOD AND CEMENT FLOOR STABLES

Fifty-two (52) or one-third of all the wood and cement floor stables reported were inspected in detail with the view of determining:

The soundness of the floors; whether or not they were well drained; if the drains connected with the sewer or emptied on the ground; whether or not the foundation of the stable was so constructed as to allow the ingress and egress of flies under the floor; the presence of larvæ or pupæ on the floor or in the manure pile or container.

The following information was obtained:

Floors tight and sound .....	36	70%
Floors not tight and sound .....	16	30%
Floors well drained .....	3	5%
Floors not well drained .....	49	95%
Foundations <i>without</i> openings below floor level .....	22	43%

Foundations <i>with</i> openings below floor level .....	30	57%
Larvæ or pupæ discovered <i>on</i> and <i>in</i> the floor .....	36	70%
Larvæ or pupæ <i>not</i> found <i>on</i> or <i>in</i> the floor .....	16	30%
Larvæ or pupæ discovered <i>under</i> the floor .....	12	23%
Larvæ or pupæ <i>not</i> found under the floor .....	11	21%
Unable by reason of construction to inspect under the floor 2)		56%
Stables found clean at time of inspection .....	19	36%
Stables found in bad condition at time of inspection ....	33	64%
Larvæ or pupæ found in manure whether in loose pile or in container .....	20	38%
Larvæ or pupæ <i>not</i> found in manure pile or container .....	4	7%
No manure on premises .....	28	55%
Manure in suitable receptacle and covered .....	3	5%
No covered receptacle provided for manure .....	49	95%
Stables with drains connected with sewer .....	3	5%

It so happened that there were no chickens in any of the fifty-two wood or cement floor stables inspected, hence the results are indicative of actual conditions regardless of the activities of these fortuitous scavengers. The reason for this seems to be that the wood and cement floor stables are located, for the most part, in the business and better residential districts where chickens are not kept at all or are confined in pens.

#### CONCLUSIONS—WOOD AND CEMENT FLOOR STABLES

From the foregoing summary we may safely claim that:

1. Flies are breeding on or in 70 per cent of the wood or cement floors as against 94 per cent of the dirt floor stables. In nearly one-half of these cases the presence of larvæ was due to the fact that the floors were not tight and sound, i. e. contained cracks, broken boards, depressions, etc., which escaped the broom or shovel. In the remainder it was due to carelessness on the part of the householder.
2. Flies were breeding under the floors of 23 per cent of the wood floor stables. This percentage should probably be much larger as in over one-half of the stables inspected the construction of the building prevented the determination of this point without precluding its possibility.
3. Two factors appear to lead to the breeding of flies under wood floor stables. If the floor be not tight and sound it permits particles of fly-blown manure, as well as urine, to fall upon the ground beneath the stall and we have here all the conditions most favorable to the development of the larva food, warmth and moisture. Again if the foundations of such stables be not tight, below the level of the floors, flies will enter this space and oviposit in the material they find awaiting them.
4. Flies were breeding in the manure pile in 38 per cent of all the stables inspected. Of the fifty-two wood floor stables inspected, however, there was no manure pile in 28 or 55 per cent, it having been hauled away just prior to the inspection. No suitable receptacle was provided for the manure in 95 per cent of the stables inspected, from which fact we may



assume that at one time or another 95 per cent of the manure piles are breeding flies.

5. It further appears that 95 per cent of these wood floor stables are not well drained in spite of the fact that the material of their construction would easily permit of such drainage with but little additional expense. Only three or five per cent of the fifty-two inspected were connected with the city sewer. In spite of the fact that a large number of stables, in fact nearly all of the public and semi-public ones, lie in the heart of the business district and in the best residential neighborhoods, their sanitary provisions are so elementary as to be barbarous. In the matter of general cleanliness the public stables far outrank the private ones.

#### GENERAL CONCLUSIONS, STABLES

1. There are in the city nearly 1,000 dirt, wood and cement floor stables where, during the season, flies are breeding in immense numbers.
2. The reasons for this condition of affairs lie, first in the faulty construction of the stables in question, secondly in defective rules of maintenance and lack of observance of those already in force.
3. A new ordinance dealing especially with the material used for flooring; proper drainage, with sewer connection where possible; covered receptacles for manure, etc., is needed to control the fly-breeding nuisance occasioned by the present conditions of the horse stables of this city.

#### DRY CLOSETS

These places are, in many localities, prolific fly-breeders, all the conditions of food and moisture being present. Flies bred in such places are a menace to the health of the public, owing to the infectious material they carry. It was with a two-fold purpose that Ordinance K-54 was passed, to eliminate them as breeding places as well as foci of infection where flies bred elsewhere could obtain a dangerous burden to disseminate in neighboring kitchens and dining rooms. This Department feels that the Ordinance above referred to, requiring, as it does, the screening of these places, has had a direct bearing upon the reduction in the typhoid fever reported this summer.

Little, if any, more can be done to prevent flies from breeding in these closets than has already been accomplished by the Ordinance. It is at best but a substitute for a complete sewerage system.

#### GARBAGE DUMPS

Excluding privies, the city dump comes next in importance as a fly breeding place in Jacksonville. There are eight or ten of these dumps distributed about the city. Here again the backwardness of the Southern cities in the disposition of various waste materials must be taken into consideration. The waste of Jacksonville far exceeds the capacity of the crematory. There are besides, numerous low, marshy places, a number of

them owned by the city, which it is desirable to reclaim for parks and other public purposes. To such localities is hauled the garbage which the crematory is unable to dispose of. In spite of an ordinance prohibiting the placing of kitchen refuse in the trash barrel, every load brings its proportion of decomposing animal and vegetable matter—from dead dogs and cats to a miscellaneous assortment of fruit rinds, feathers and fish heads. Fermentation takes place quickly and in every section of these dumps are found the larvae of the house fly during the warmer months.

The Department in charge of garbage collection has tried, upon the solicitation of the Health Department to minimize the nuisance as far as possible by covering this evil smelling mass with clean sand. In order to determine what depth of sand would be required to prevent the maturing of these larvae we have conducted some experiments along the line of those recently carried on by Drs. Stiles and Miller, reported in the Public Health Report of August 25th, 1911.

These experiments have consisted, briefly, in burying fermenting matter containing fly larvae or eggs at various depths in ordinary soil. For this purpose tubes of four-inch galvanized rain spouting were used, with eighteen-mesh copper wire cloth fastened over the lower end. The material containing the larvae was introduced on top of this tube filled with sand and buried in the ground. Two inches of the upper end remained exposed and the top was covered with copper wire cloth, leaving a chamber in which any flies which might hatch would be confined. Tubes in length varying from six to forty-eight inches were used. The larvae or eggs, were placed in stale bread previously sterilized and saturated with pure bouillon culture of *B. prodigiosus*, upon which presumably the larvae would feed before starting on their journey upward. The sand covering the larvae was sterilized.

From all of these tubes, adult flies were recovered in periods varying from five to sixteen days, the average for six different tubes being seven days. One tube prepared as described and kept in the laboratory, instead of being buried, in the present month (November) took sixteen days to hatch its first crop of flies, owing presumably to the cold weather, the room being without heat at night and the temperature much lower than the outside temperature during August when the bulk of these tests were made.

The flies, when hatched, were treated in two different ways: some were introduced alive into flasks containing sterile bouillon and allowed for an hour or two to deposit their excrement upon the sides of the flask, they were then agitated and the bouillon incubated; others were macerated before being introduced in the flask in order to thoroughly expose the contents of the alimentary canal.

From flies hatched from 14, 26, 36, 41 and 48 inch tubes *B. prodigiosus* was recovered. It will be noted from the average of seven days that the depth at which the larvae were buried apparently played little part in the length of their development into adult flies, although the shorter tubes hatched a larger number of flies than did the longer ones. How long these flies would continue to distribute in their specks *B. prodigiosus*, I do not

know. Faichnie in 1909 recovered *B. typhosus* from flies for several days after the latter had emerged from larvae fed on feces containing these organisms. Ficker in 1903 recovered from flies *B. typhosus* twenty-three days after their infection. In our experiments, sixteen days is the longest time that *B. prodigiosus* appears to have remained in the intestinal tract of the larvae and pupae of the fly from which we subsequently recovered it.

As already stated, 48 inches is the greatest depth from which we recovered flies buried as eggs or larvae. The onset of cool weather has left the work incomplete in many particulars. Dr. Styles succeeded in recovering them through 72 inches of sterile sand.

In view of these facts, it would appear that the six or eight inches of sand customarily used in Jacksonville to cover the garbage dumps would in no wise interfere with the hatching of flies from the decomposing material beneath. In the inspection made of these dumps larvae were found at a depth of eighteen to twenty inches. Presumably they all hatched.

In an active campaign against the house fly in municipalities such immense breeding places as these garbage dumps should, most undoubtedly, be discontinued. The possibility of distribution, by adult flies, of micro-organisms ingested during their larval stage causes the dumps to assume a still more serious aspect from the point of public health when the contents of the average trash barrel are considered. Should not also the trenching of night soil as practiced by no small number of communities be discontinued in view of this faculty of the insect?

It is my belief that a construction and maintenance of horse stables along the lines indicated, the screening or, better still, the abolition of privies and discontinuance of garbage dumps will so far control the fly pest as to almost entirely overcome the dangers of disease dissemination by this insect.

There is another class of breeding places which will continue to furnish a certain number of flies—those occasioned by the chance scattering of decomposing animal and vegetable matter about the yards and alleys and by the not infrequent custom, in the best sewered communities, of a certain class of individuals, mostly ill-cared for children, of depositing their excrement in any locality which affords a convenient concealment at the time the desire for relief comes upon them. Where a large proportion of the population is composed of negroes, as lacking in nicety of habits as in responsibility, this incubation of the house fly will never be eliminated, and in connection with the abolition of the major breeding places, if we are to attain the full reward of our endeavors, we must, I believe, adopt the suggestion of Prof. Hodge,—that of trapping the adult fly during the time elapsing between its issuance from the puparium and the establishment of sexual maturity. According to Hewitt and Griffith, the female oviposits from ten to fourteen days after emerging from the puparium. This period is most favorable for her capture. The enormous number of progeny of a single female fly during a breeding season, as estimated by Dr. Howard, seems a strong argument for her destruction early in the year.

We have done some outside trapping in Jacksonville on a small scale with most gratifying results, the type of traps used being those made of wire cloth in the shape of a cylinder upon a metal frame with a cone inside arising from the bottom. They may be obtained from several different manufacturers at a small figure and when baited with syrup or other suitable material perform most excellent execution. In three days at a back door of a down town restaurant, we captured 9,000 flies while inside a fish market in a similar period, we captured over 10,000. A second exposure of the trap behind the same restaurant resulted in the capture of comparatively few, presumably owing to the local nature of the pest.

I believe, in any community where the habits and dangers of this insect have begun to be appreciated by the laity, (through the efforts of civic associations and other organizations interested in the public good) fish and meat markets, restaurants, public stables and such other places as afford especial attraction to the fly, may be induced to install such traps with little persuasion.

#### GENERAL CONCLUSIONS

First: where infectious material, as in open privies, exists in a community with exposed food supplies together with an abundance of flies, active measures against this insect are a public health necessity.

Second: the house fly may be practically eliminated from municipalities by the proper construction of horse stables with especial reference to water tight, well drained floors and the prompt removal of manure; the rendering fly-proof of surface privies and the abolition of garbage dumps.

Third: the burying of infectious material if fly-blown at any practical depth will not prevent either the maturing of the contained larvae or the dissemination of infection by the flies hatching therefrom.

Fourth: trapping, especially early in each fly season, is a practical auxiliary measure.



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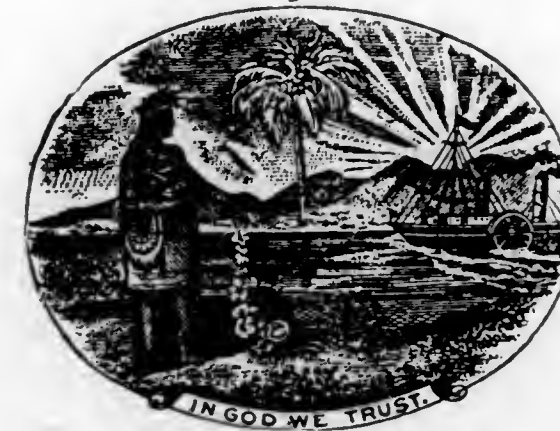
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FLORIDA  
HEALTH NOTES



OFFICIAL BULLETIN  
STATE BOARD OF HEALTH  
OF FLORIDA

JACKSONVILLE, FLORIDA

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EDITED BY

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VOLUME VI—JANUARY TO DECEMBER, 1911

# FLORIDA Health Notes



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*A State which will not prevent what can be foreseen is open to indictment.*  
—Munsterburg.

THE RECORD CO., ST. AUGUSTINE, FLA. 41250



## SALUD.

To one and all of our readers the NOTES offers a hearty wish for a healthful and prosperous New Year. It is believed that those who have followed the lessons of the HEALTH NOTES and have kindly listened to and taken advice as to the care of their health have escaped many of the ills and discomforts incident to human existence. To those who have read and been indifferent and have suffered we offer our sympathy, with the hope that the coming year may find them more inclined to follow the precepts and teachings which the NOTES offer as being gathered from the very best and trustworthy sources. At the commencement of 1911 the State Board of Health expresses to the people of Florida, whose public servant it is, a deep and keen appreciation of the confidence which almost to an individual is reposed in the integrity, sincerity, and (may the NOTES be pardoned for saying so) the ability to direct their thoughts and actions in the right channels of healthful and needful sanitation.

Without the mutual cooperation of the individual citizen and the State Board of Health very little can be accomplished; but by a strong pull together and a faith in the Board to request only of the people those things that are necessary for their own good, or for the general good of the entire community, the State will build up not only in health reputation, but in an increase of population, which must, through commercial activity, place Florida in the front ranks of States attracting universal attention from the whole country. The NOTES hopes and trusts that each one of you, its readers, will enjoy good health first; for without it prosperity—commercial or intellectual—will bring but little happiness.

## THE MANAGEMENT OF SMALLPOX

BY DR. C. T. YOUNG.

*Assistant State Health Officer of Florida.*

Popular support or cooperation is an absolute essential to the successful control of this disease. Upon it alone depends the degree of thoroughness of, as well as the time necessary for, the eradication. Antagonism and lack of a proper public sentiment are the most active agencies in the spread of the malady, defeating as they do the best efforts of the Health Officer, by oftentimes converting his isolation measures into a humiliating farce—thereby paving the way for indifferent and uncertain results.

In order that the public may secure for itself the greatest amount of protection from these insidious and not infrequent visitations it is necessary that it possess a knowledge of the more prominent characteristics of smallpox. The main points of these characteristics should be constantly borne in mind, so that we may be better able to safeguard ourselves from the imposition of those careless and thoughtless people who, while suffering from mild attacks, frequent public places and thoroughfares. Again, quite often these cases develop in the interior, far away from an experienced physician; at such times it is equally important that the suspicious cases be detected and promptly reported to the authorities.

After an exposure to one suffering from the eruption, which fact is generally though not always recalled, the disease begins suddenly with a chill or rigor followed by fever, headache, vomiting, severe back-ache, most prominent in the small of the back. These symptoms last two or three days and then suddenly subside.

The characteristic eruption now begins to appear. It consists at first of numbers of little red pimples, or pin points, which gradually enlarge and when rubbed over with the ball of the finger give a shotty feeling to the touch. After about two days these pimples begin to fill with fluid, first clear and then pearly, and finally yellow—forming pustules.

At this time they are the size of a split pea, and are surrounded by a thin red zone. They are considerably raised above the skin, and are depressed or umbilicated at the center. After the ninth day they begin to dry up; so that from the appearance of the rash, the successive stages of pimple, vesicle and pustule occupy some ten to twelve days.

A most important point is the distribution of the eruption. The first pimples appear about the face, on the forehead, and around the lips; next the wrists and ankles, arms and legs, palms and soles; afterwards on the remainder of the body. The rash is always thickest on the face, hands and feet—the exposed surface of the body; less so on the covered or clothed area. Remember that the appearance of the bumps is always followed by the cessation of all symptoms. Then the individual feels well, gets up, and unless detained goes about his work. Later the pain and discomfort following the development of the lesions force him to again take his bed.

Three things to bear in mind as a key to the diagnosis are, *the nature of the initial symptoms, character and distribution of the eruption.*



Should there occur a case of a suspicious nature in any section the first duty of those at hand is to call a competent medical authority. The next is to take such steps as may be necessary to prevent further exposure pending the examination of the physician. Should he find the complaint to be smallpox it becomes his duty to report the matter to the State Health Officer, who in turn at once makes the necessary arrangements for its further investigation and management.

The measures employed by the State Board of Health in managing an outbreak of smallpox can be discussed briefly under three headings.

First, *Isolation of the Infected*. This is accomplished most satisfactorily in pesthouses, buildings or tents, removed from populated areas. Where this is not possible, the second-story back room, or some other less frequented apartment, is of equal service. Here the patient should be confined and attended only by one individual, who has sufficient intelligence to understand and carry out the instructions of the attending health officer, and who has been successfully vaccinated or has had smallpox.

Second, *Vaccination*, of all persons who have been exposed, no matter how remotely, to the infection, and re-vaccination of those individuals whose scars are too old to insure protective influence.

Third, *Disinfection*. After the desquamation is complete, the patient is bathed in an antiseptic solution, given fresh apparel and discharged. His apartments are then thoroughly fumigated with either formaldehyde or sulphur dioxide. Should these be impractical a solution of bichlor. Hg., one to a thousand, is employed in washing down the walls, floors, and furnishings.

Given the statutory authority to enforce vaccination other methods would be useless. By it a community could be made so unreceptive to the disease as to render its further spread impossible, and any one suffering from it would be as effectively isolated as though he was placed in a dungeon a mile underground. With a people so immunized there would be no need of disinfection. Smallpox could then be found only in the archives of medical history—a forgotten thing of the past.

In the absence of a proper legal enactment providing for the enforcement of vaccination the State of Board of Health occupies a position similar to that of a woodman who with great ceremony is sent out to chop wood without an axe. Our predicament is quite obvious. Too often an indifferent success attends our most persistent efforts.

Instead of being able to close these situations with dispatch, a great deal of valuable time is wasted in combating the antagonism of fanat-

ics, fatalists, devotees of nonsensical religious cults, and a host of irresponsibles; many of whom through contracting the disease come to sorrow and not infrequently death—realizing too late that *vaccination and that only, prevents smallpox*.

## OUR POLICY

In the last annual report of the State Board of Health, at the commencement of the present year attention of the reading public of the State was called to the fact that there would very probably be a "springing-up" of smallpox during the present year. The reason given was that it has been ten or twelve years since the last violent outbreak in the United States, and the increase of population since that time, probably with vaccination not systematically followed on account of the absence of the disease and an indifference always begotten when danger, from whatever source, whether violently physical or disease-borne, is not immediately apprehended. The NOTES from time to time during the year has called attention to this and has urged upon the people the wisdom of protecting themselves by being vaccinated. There is no statute law in the State for compulsory vaccination of the people. A rule of the State Board of Health makes it obligatory for school boards to see that school children are properly vaccinated before being admitted to the public or private schools of the State, and also for manufacturers to have their employees thus protected, but the courts have never been solicited to enforce this rule, and as much as it is disliked to admit it, it has been observed more in the breach than in the enforcement. Quite recently one of the leading school boards of the State that had insisted upon vaccination as compulsory before admittance into the schools of the county rescinded the order, thus making it still more embarrassing to the State Board of Health to guard against possible outbreaks which nearly always cause fright and panic when a case of smallpox occurs in any of the public schools of the State. However, as the legislature "turned down" the proposition of the State Board of Health some eight or nine years ago that employees of large operating plants should see that their workmen were properly vaccinated before being brought into the State, and since has made provision in a recent law that no special system of therapeutics shall be insisted upon when individuals are isolated on account of any contagious disease, it is not thought desirable for the board to ask for or insist upon compulsory vaccination for the State at large. In fact the NOTES, speaking for the State Board of Health, will say the State



Health officer does not wish any such procedure, and can say also with equal positiveness that he is contented to allow the responsibility for cases of smallpox, with their consequent disfigurement and perhaps death, to rest upon the individual citizens themselves. Under his advice the State Board of Health has offered a free policy, so to speak, of an insurance against smallpox by gratuitously issuing vaccine points of bovine virus, which have been manufactured under the most rigid aseptic conditions prescribed by the United States Government and frequently tested by the Bureau of Public Health and Marine-Hospital Service, and, therefore, if the citizens of the State will not take the advice which long experience gives in dealing with matters relating to the public health, nor the counsel of the State Board of Health, then there should be no criticism of the Board or its management, when smallpox becomes more than an isolated case in each county.

There is a side to the question, though, that the State Health Officer thinks should be put squarely to and before the people, and that is the expense which the taxpayers of the State have to incur from either the opposition, prejudice, or indifference which follows the default of general vaccination in the State. The Statutes of Florida impose upon the State Board of Health the care and management of certain contagious diseases, smallpox being one of the number, and any case of smallpox must be, by law, reported to the State Board of Health for such action as the State Health Officer may see fit to order in the management and control of the same. Formerly any case was placed under guard, fed and treated. The experience begotten from this system, as well as the information obtained from other sources by other boards of health, very soon emphasized the fact that such a method was faulty in its efficiency. That is to say, that individuals who were employed as guards and who could only be paid a small sum per diem on account of the excessive expense in the management of smallpox epidemics, were generally very negligent of their duties and had not the discretionary ability which should actuate them in the proper handling of a delicate situation. Knowing that smallpox can be prevented by vaccination and that epidemics are stamped out only by speedy and successful vaccination of a community, the State Health Officer decided that a management based upon this principle was the only logical and sane course to pursue. Therefore, it may be laid down as a dogma or rule of the Board, because the Board has sanctioned such a procedure, that individuals with smallpox must be isolated; must be

ordered to stay at home and to keep off the public streets and public thoroughfares and forbid visitors. Instructions, if disobeyed, will be punished by legal measures after recovery of the patient, because it is very easy by circumstantial evidence to prove that another has contracted the disease by being exposed to the individual who was to keep to himself or herself.

Second, the immediate vaccination of all persons who are known to have been exposed to any one case; and third, general advice of vaccination of a community where smallpox has been introduced.

These may be said to be the axioms of the State Board of Health in regard to smallpox, and no further action is deemed necessary or needful.

### GUARDING SMALLPOX

To those who clamor for guards for smallpox patients, the NOTES would ask this question: Supposing that there is one or a half-dozen cases of smallpox corralled in a house and guarded; and suppose that one of them should get up and walk out, and the guard should tell him to stop and he didn't do it, would the guard have a right to shoot? Who would have a right to give the guard the right to shoot? And suppose he should shoot and kill the patient, and the patient's friends should have the guard arrested and tried for murder, what would be the attitude of the court? For you must know that the friends could show that the patient was not jeopardizing the life or health of any one that is vaccinated and that vaccination does not jeopardize the life or health of any one, and that vaccination is in reach of every one, and that for these reasons it would be apparent that the patient would not be jeopardizing the life or limb or health of any one not so willing it, and therefore could not be held responsible; and the guard could not be justified for the murder unless it could be shown that he had committed it in an attempt to keep the patient from jeopardizing life or health of some one who could not prevent it. What verdict then could be rendered other than guilty of murder, or at least manslaughter? No man would choose to be placed on trial for his life under a charge like that for the little fee that guards are usually paid. No man would shoot. He is only bluffing. The whole system of guarding smallpox cases is a system of bluff from beginning to end. Are you, as a taxpayer, willing to have your money squandered in a bluff game of that kind?

But on the other hand, suppose this all occurs in a vaccinated community, and there is no guard, and a patient walks out, what harm can he do? Everybody has guarded himself, and this is no bluff.

The NOTES will be obliged to the State papers to copy this for information of their readers.

The willingness of the people of Orange county to accept the advice of the State Board of Health is evidenced by the fact that over eighteen hundred citizens and children have been vaccinated during November and December in that county, and we have information that of the white school children in Orlando only five to ten per cent. remain without this protection, and the colored school children are thoroughly vaccinated. The local health and school authorities are to be commended for their wisdom in adopting this method of protection against small-pox.

The HEALTH NOTES always appreciates hearing from its readers, with comments on the publication and its contents, and especially is this true when encouragement is offered in the work of protecting and improving the public health of the State.

Within a few days after the publication of the NOTES for December last, the following letter was received from one of our readers in South Florida:

DECEMBER 14, 1910.

*Joseph Y. Porter, M. D., State Health Officer, Jacksonville, Fla.*

MY DEAR SIR:—I must write a few words and thank you for the article in the December NOTES in regard to cleanliness around railway stations, published on pages 178-179. This is a subject I have felt very much interested in for years. A few trees planted around a station, palmettoes for instance, which are not very much in the way, would add to the appearance of many rural stations.

But there is something of greater importance, and that is the universal filthy condition of railway station water-closets. I may mention that only lately in visiting three of our nearby towns, Lake Helen, New Smyrna and Ormond, the closets were not fit to enter, only necessity knows no law. I presume these three are a fair average of many others, if not of all. Two of these are stations at which passengers have often to wait an hour or more for connecting trains.

There are people I know who think such places *belong to be dirty*. I have heard men use the expression "as dirty as a backhouse," etc.

I think the State Board of Health, especially in its sanitary inspections of many of the towns, has done very much in the past few years in the interest of reform in this direction, but at the same time there is room for much more reform.

Yours very truly,

## FLORIDA BOARD OF PHARMACY

The Board of Pharmacy for the State of Florida will conduct its next examination of candidates for registration of pharmacists, in St. Augustine, Fla., commencing at 9 A. M. on the 23d day of January, 1911, and continuing two days. It is required that a candidate be at least eighteen years of age and that he submit proof of four years' practical experience in a retail drug store, time spent in College of Pharmacy credited as such. Applications for examination must be in this office ten days prior to the date of examination.

A prize of one year's membership in the Florida State Pharmaceutical Association has been offered by Mr. E. Berger, of Tampa, president of the Board of Pharmacy, for the highest general average obtained in each examination.

D. W. RAMSAUR, *Secretary*.

Palatka, Fla.

## TELEGRAPH CHARGES

Once again the State Health Officer requests the NOTES to say to the physicians of Florida that the Statutes of the State do not contemplate reporting to the State Board of Health by telegram cases of diphtheria, scarlet fever or any of the minor communicable diseases, such as measles, and whooping cough. Cholera, smallpox and yellow fever may be reported by telegram to the State Board of Health if *expeditious mail facilities do not offer*.

Collect telegrams to the office of the State Board of Health for diphtheria or scarlet fever are not authorized by law, and as a matter of fact are unnecessary as an expense to the State Board of Health Fund; for while the executive office of the Board desires to know of the existence of these diseases, wherever they may occur, and enjoins upon all physicians a prompt reporting of this character of morbidity happening in their professional practice, yet a mail report answers all the purposes, for it is considered that every physician in Florida knows that diphtheria should be effectually isolated, a swab specimen from the throat sent to the State Board of Health laboratory, and an administration of antitoxin be given both as a curative agent and a prophylactic means of preventing further spread in a household. So, too, in regard to scarlet fever—the patient should be well isolated from the well persons in the house, and there should be no intermediary communication with the sickroom. It is supposed by the State Health Officer



that doctors know how to treat both diphtheria and scarlet fever, and therefore a collect telegram informing the Board does not add either to efficient treatment or personal reputation. It does add materially to the Board's yearly expenses.

Please, therefore, do not send any more collect telegrams of report of the above diseases, diphtheria or scarlet fever, because, as much as the State Health Officer would dislike to do so, he will hereafter be compelled to refuse payment and, of course, they will then be thrown back on the sender.

### SANITATION IN THE PHILIPPINES

Few people realize the vastness of the area of the Philippine Islands, and fewer still the vastness of the problems confronting the American government in assuming control and management of the territory. There are some three thousand islands in the group. The total area of the archipelago is about one hundred and fifteen thousand square miles, or about twice the area of Florida. And the total population is about seven times that of Florida.

When America took possession, twelve years ago, everything that would be classed as institutions of civilization was in the crudest state imaginable. This was particularly true of sanitation. Indeed it seems to have been doubtful whether the word had found its way to the islands, even among the higher strata. The insane and the maniacs were hospitalized by staking them with a dog-chain. Manila, with a population of over two hundred thousand, hadn't a vestige of a sewerage plant. There was not an artesian well upon the islands. The water used was mostly from rivers, which same rivers were used for bathing and for the buffalo-wallows. Disease was rampant. While there is no way of definitely determining it, it is believed that the death-rate was not less than fifty per thousand. Cholera, plague and smallpox raged from year to year like a fire in a forest.

But all that is changed now. Under the benign influence of American civilization (that is to say universal vaccination), smallpox has been practically eradicated from the islands. Cholera has been greatly reduced. The death-rate in Bilibad Prison has been reduced almost unbelievably. Little by little sanitary reforms are being instituted in all parts, and one by one the diseases are being, if not conquered, at least materially checked.

To us, situated almost in a similar latitude, it is of interest to know that those islands have a variety of diseases that we wot not of. For

example, anthrax, beri-beri, amebic dysentery (common), gangosa, plague, sleeping sickness, yaws, etc., for exemption from which, thanks be.

In view of these great improvements under American rule, and in view of the fact that humanity may confidently look forward to the total eradication of such diseases as plague, yellow fever, leprosy, etc., only when attacked upon a universal scale, it is likely that our country may yet receive the thanks of even those who opposed the taking over and colonization of the Islands.

### PUBLIC HEALTH LITERATURE

The State Board of Health has lately received limited quantities of the following literature:

"The Field Investigation of Epidemic Poliomyelitis; What the Health Officer Can Do Toward Solving a National Problem." Reprint No. 55 from Public Health Reports of the U. S. Public Health and Marine-Hospital Service.

"Cholera, Its Nature, Detection, and Prevention." Reprint No. 53, from Public Health Reports of the U. S. Public Health and Marine-Hospital Service.

"Physicians' Pocket Reference to the International List of Causes of Death." Department of Commerce and Labor, Bureau of the Census.

These are intended for distribution to the medical profession of the State, on application.

The office has on hand also two pamphlets in regard to tuberculosis. "Directions for Living and Sleeping in the Open Air," prepared by the National Association for the Study and Prevention of Tuberculosis, which will be of especial interest to those suffering with this disease. "What You Should Know About Tuberculosis," prepared by the Department of Health and the Committee on the Prevention of Tuberculosis of the Charity Organization Society, of New York City, is especially suitable for the young people and for use in classes in giving instruction about tuberculosis.

Requests for this literature will receive prompt attention.

### PICTURE FILMS FIGHT TUBERCULOSIS

*"The Red Cross Seal" Portrays Interesting Drama.*

Moving picture theaters have been enlisted in the army of crusaders fighting tuberculosis by selling Red Cross Christmas Seals, and on

December 16th in all parts of the United States a film entitled "The Red Cross Seal" was exhibited for the first time, according to an announcement of the National Association for the Study and Prevention of Tuberculosis.

The picture drama has been produced by the Edison Manufacturing Company in co-operation with the National Association for the Study and Prevention of Tuberculosis and the American National Red Cross. It portrays an interesting story of New York life, and is besides filled with educational scenes that show how tuberculosis is contracted and how it may be prevented and cured. The film is 1,000 feet long. The tuberculosis workers in every State of the United States are urging their local theaters to exhibit the picture.

The plot of the story centers about the winning of the prize of \$100 for the best design for the Red Cross Seal for 1910, by Ellen Williams, a poor girl of the tenements who makes her living by decorating lampshades for very meagre wages. She has applied to the art school where she longs to take a course of study, but finds that the cost, \$100, is too much for her purse. As she turns to leave the school, a young man of wealth sees her in the office and is struck by the pathos of her beauty and disappointment. Tired of his purposeless life, Jordan resolves to see for himself "how the other half lives." Dressed as an ordinary day laborer, therefore, he rents a room in the same tenement with Ellen, and soon becomes greatly attached to her. He sees her struggle to win the \$100 prize for the Red Cross Seal design, and finally sees her win it. Then he sees her give up all the ambitions of her life, when she turns over the \$100 to a neighbor, so that her consumptive boy might have a chance to be cured at a sanatorium.

Struck by the noble sacrifice, Jordan unknown to Ellen, buys the tenement, renovates the neighboring apartment, enlists the co-operation of a district nurse, and helps thus to restore the consumptive to health and remove from his family the danger of further infection.

Thus, in the end, when Jordan reveals to Ellen his identity, she finds in his proposal that she share with him his palatial Fifth Avenue mansion, she has gained a great love, a home, and the satisfaction of her ambition, all because of the Red Cross Seal.

### VACCINATION

The following letter was written late in December last to the President of one of Florida's Woman's Clubs, and not only states the attitude

of the State Board of Health of Florida regarding vaccination, but gives some of the reasons for such an attitude.

JACKSONVILLE, FLA., December 27, 1910.

Mrs. ....

MY DEAR MRS. ....:—After my talk the other day before the Woman's Club, and while questions were being asked, I feared that I detected a vein of disapproval of my attitude toward vaccination. I hope I was mistaken. In any event, I want to relate to you a situation that I have since that time observed, and which I think will be of interest to you.

Leaving Miami, I went to Havana, and while there enquired into the smallpox situation. I was led to do this by the great number of smallpox-marked people that I saw on the streets. Mrs. Jones, of Chicago, who was there at the time, also observed it and remarked to me about it. My inquiry developed a situation like this: That prior to 1900 over six per cent. of the total number of deaths in Havana was from smallpox. The disease was rampant in the island when America took temporary charge. General vaccination was at once instituted. Then in 1901 a vaccine laboratory was established, since which a half-million vaccinations have been done. The sum total of results are that since 1902, though they have had many cases of smallpox brought into Cuba on vessels, only one case has developed in the island. The circumstances attending this case are very instructive.

A Syrian girl was taken off a boat to Las Animas Hospital (the hospital for contagious diseases) and, as their custom is, upon the arrival of a smallpox case everybody at the hospital—doctors, nurses and attendants, seventy-two in number—were vaccinated. There was one man, however, that opposed vaccination, and slipped around, taking his position behind in the line, and in that way escaped. The tenth day afterward he died of smallpox. And this is, as I say, the only case that has been contracted in the island since 1902. Contrast that with our own smallpox record in Florida this year—nine hundred cases and nine deaths. Imagine how I must have felt when visiting the vaccine laboratory over there to have the Director, Dr. De La Guarda, show me a letter that he had just received from a Cuban Consul in one of our Florida cities, asking for sufficient vaccine to vaccinate three hundred people and telling him at the same time that smallpox was epidemic there. And to think of our once "more-holier-than-thou" attitude toward Cuba. Let us take in our sign, and among the world powers in the management of smallpox let us acknowledge our place in the rear ranks. And when even such little nations as Cuba are discussing smallpox management, let us keep silent, for we have failed—they have succeeded.

And what is more, it will ever be thus till we adopt universal vaccination. No nation in the history of the world has ever rid itself of smallpox by any other method. Why should we expect to do more? And if we could so deceive ourselves for awhile, are not one hundred and thirty-four years of trying it, and one hundred and thirty-four years of failure, sufficient to convince us of the delusion?

I write you this hoping that you will read it before the Woman's Club, or indeed give it to the press, not only because it indicates where we stand in the



scale, but to prepare us for what we may reasonably expect during the next few months.

The last weekly public health bulletin of the U. S. Public Health and Marine-Hospital Service reports over seven thousand cases of smallpox in the United States, extending from Maine on the east to California on the west, and embracing every State between. There are perhaps seventy-five cases in Florida now. And this is the season of migration. The other day a case developed in Sarasota just from Chicago. A case in Jacksonville, from South Carolina, a case in the western part of the State from Alabama, and similar instances being constantly reported will indicate with sufficient seriousness what may be expected at any place and any time. Those places having the largest population and enjoying the most travel will, of course, stand the greatest chance to be perturbed by the presence of smallpox.

It should not go unobserved, however, that the individual who is vaccinated need not be annoyed by the announcement of smallpox in the community. And the same observation may be applied to the community. Orlando, for example, foreseeing what is coming, has fortified itself against it by general vaccination. They have right recently vaccinated no fewer than eighteen hundred persons. Now let smallpox do its worst—Orlando will be relatively free from it. Ocala and St. Petersburg are taking the same wise precautions. It hasn't been a great while, by the way, since St. Petersburg had quite an experience with smallpox. And though she had to pay dearly for it, the experience that she gained was valuable. She is now putting it to good use.

Now, another thought or two. I think I told you in my talk that the State Board of Health takes the position that general vaccination is the only rational, the only practicable, and the only successful means of controlling smallpox. From what has gone before you will see some of the reasons for this. But there is one more that I have not mentioned. And that is that it is not only expensive to construct and maintain hospitals for smallpox, so expensive indeed that that alone precludes the possibility, but most communities will not stand for such an institution. The Board does have isolation hospitals at the following points: Jacksonville, Tampa, Pensacola, Miami, and did have one at Key West, but of these five, one was burned by some incendiary, and two attempts have been made on a second, burning in one instance the kitchen. Other houses have also been burned on account of an accidental smallpox infection, notably in Marion, Pasco, Orange and Leon counties; possibly others that I do not remember just now.

If in view of what has been said, you as President of the Woman's Club can see your way clear to bring such pressure to bear in the right place as to have the town of ——— protected against an invasion of smallpox, you will make your influence felt for the good of your town as in no other way that I can conceive of. If the State Board of Health can render you any assistance in the matter, it will be a pleasure.

Very truly yours,

(Signed) HIRAM BYRD,

Assistant State Health Officer.

## OCALA LEADS, AS USUAL

### THIS TIME IN MEDICAL EXAMINATION OF SCHOOL CHILDREN

(*Ocala Banner*, Dec. 11, 1910.)

During the past few weeks some of the physicians of the city have been devoting considerable time to the examination of the pupils of the white schools. This examination embraces the general condition of the child, the condition of the eyes, ears and throat and indication of hookworm. Where the child had not been vaccinated, this has been done, in compliance with the rulings of the State Board of Health, unless there has been a request from the parent that this be attended to by the family physician. Where there have been indications of hookworm the parent has been notified of this fact, and the steps necessary to be taken in order to detect the presence of this disease and also that free treatment for this trouble may be obtained if it is desired.

This examination is being conducted along the lines pursued by physicians in those cities so fortunate as to have medical inspection of the schools, and Ocala may well be proud of the fact that she is one of the few places of the South to take this step along health lines. The physicians who are conducting this examination are doing the work for the benefit of the children and humanity's sake only. Our hearty thanks are due them.

## TUBERCULOSIS MILLIONS DOUBLED IN 1910

**\$15,000,000 SPENT IN CONSUMPTION FIGHT—OVER 62 PER CENT. PUBLIC MONEY**

How the money spent last year in the anti-tuberculosis campaign practically doubled that spent in 1909, is shown in the second annual statistical statement published January 3d by the National Association for the Study and Prevention of Tuberculosis, in its official organ, the *Journal of the Outdoor Life*.

The statement, which is based on reports from all parts of the United States, shows that in 1910, nearly \$15,000,000 was spent in the fight against tuberculosis, as opposed to \$8,000,000 spent in 1909. The largest item of expense in 1910 was for treatment in sanatoria and hospitals, \$11,376,500 being expended for that purpose, or more than double the amount for 1909. The anti-tuberculosis associations spent

\$760,500, and tuberculosis dispensaries, \$889,000. The special municipal and State expenditures aggregate \$1,750,000.

The statement declares that the most significant fact in the survey of the year's work is the increase in the percentage of public money spent. While in 1909, 53.5 per cent of the total expenditures was from federal, State, municipal or county funds, 62.6 per cent came from public appropriations in 1910. The actual amount of public money spent in tuberculosis work this past year was \$9,267,900, or more than double the amount from this same source in 1909. This fact indicates, the National Association declares, that anti-tuberculosis associations are gaining ground, by securing increased appropriations from public money.

New York State again leads the country in the money spent, her total of \$4,245,000 being more than double her expenditures for tuberculosis work in 1909. Pennsylvania is the second State and Massachusetts third. The following table shows the ten leading States, with their expenditures from public and private funds:

## EXPENDITURES IN 1910.

State.	Public.	Private.	Total.
New York.....	\$3,039,000	\$1,206,000	\$4,245,000
Pennsylvania .....	1,431,000	673,000	2,104,000
Massachusetts .....	1,118,000	400,000	1,518,000
Colorado .....	105,000	731,000	836,000
Ohio.. ..	573,500	76,000	649,500
Connecticut .....	338,500	167,500	506,000
New Mexico.....	250,000	251,000	501,000
Illinois .....	245,000	208,000	453,000
California .....	88,000	316,000	404,000
New Jersey .....	255,000	130,700	385,700

The State Health Officer has written each of the Agents of the State Board of Health, asking for their annual report of health conditions in their respective counties. It is hoped that prompt attention will be given this request and that the Agents will make a special effort to furnish detailed accounts of their work during the year. The Board has found that these reports from the several counties comprise an interesting and valuable feature of the Annual Report of the State Board of Health.

# FLORIDA

## Health Notes



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If you receive it without asking, it means that someone else has requested it for you.

When you change your address drop us a card.

When giving change of address, give both the old and the new.

Anything you want to know about the public health we will try to tell you.

Any information you want about communicable diseases of domestic animals we will help you to get.

*While the vaccine discovery was progressive, the joy I felt at the prospect before me of being the instrument destined to take away from the world one of its greatest calamities, blended with the fond hope of enjoying independence and domestic peace and happiness was often so excessive that, in pursuing my favorite subject among the meadows, I have sometimes found myself in a kind of reverie. It is pleasant for me to recollect that those reflections always ended in devout acknowledgments to that Being from whom this and all other mercies flow.—Edward Jenner.*



### SMALLPOX OUTLOOK

What is the smallpox outlook in the State? Now just what has it been for, lo, these ten—twenty years? Has anything happened to change its complexion? Not that I am aware of. Then the outlook is just what it has been. The thing that will come is just the thing that has been coming these years. That is to say, case after case, outbreak after outbreak, panic after panic, first here, then there; sometimes a little nearer, sometimes a little farther; sometimes quickly checked, sometimes slow and tedious; sometimes causing little alarm, sometimes setting the population wild; sometimes leaving scars, sometimes leaving death in its track, often neither; sometimes among negroes, sometimes among white people; always among the unvaccinated, never among the vaccinated—these are the things we have been having these years, and the things we will continue to have as long as we look to anything but vaccination to stop it. We might just as well make up our minds to grin and bear it. An old stock-raiser in South Georgia used to break his little mules to harness by hitching them up one at a time with a large mule to a large wagon. The little one would sometimes rear and snort, but the wise old stockman knew that the old mule would hold him. He would placidly encourage the little fellow by saying: "Go on, go on, you'll get used to it!"

Today's smallpox record for instance: Sixteen cases reported from one town; three from another where a young lady with it has been working in a large department store; one from another tourist place; twelve where he came from; two in a certain jail; and one taken off the train. Doesn't that look like we'll get used to it?

### PELLAGRA

Lombroso was an Italian. He founded a new theory as to the cause of pellagra. If he didn't start it himself he took it up from some obscure place and gave it a high seat in the synagogue and made people bow to it. That was the cornbread theory. So Lombroso is accredited with heading the "cornbread" school of pellagra. A good man this, Lombroso. He died about a year ago and the world mourned the loss of one of its masters in medicine. He wrote a great deal about pellagra and how it was caused by spoiled maize. He caught the ear of the French. And then a Frenchman by the name of Marie wrote a book on pellagra. It was a condensation of the elaborate writings of Lombroso. And he caught the ear of the Americans. And two Americans, Drs. Lavinder and Babcock, translated the Frenchman's book into

English. And for awhile it seemed that pellagra couldn't be caused in any other way than by spoiled corn. The tide of popular opinion had set, and on it rolled, carrying all before it. Sometimes a mild protest could be heard, but it was soon drowned in the din. Sometimes a doubting Thomas would ask impertinent questions, like "Why haven't we had it in America, the home of the corn, all these years that we have been using cornbread?" But one look from the cornbreadists was enough to send him like Montmorency when he encountered the cat.

But great and good men may make mistakes. Robert Koch, who was both, doubted the inter-transmissibility of human and bovine tuberculosis. Possibly Lombroso was mistaken. Possibly his disciples were. It may be that some other will arise who will be able to throw more light on the subject than has been thrown heretofore. Indeed, one English physician, by the name of Sambon, has already advanced a theory, which has much evidence to support it. This theory assumes that the sandfly is the intermediate host and that pellagra is transmitted something like malaria or yellow fever, only by a sandfly instead of a mosquito. And this theory of Sambon is being seriously considered by the foremost students of the world. It is in a way unfortunate that this work of Marie should have been so delayed in coming out, for it is almost out of date ere it leaves the press. But on the other hand it may be fortunate, for it will tend to keep the cornbread error, if it be an error, from getting too widely and deeply rooted. The chief value of the work, as I conceive it, is that it is a compend of information on the disease, though that has to be used with discrimination, as it is an elaborated argument for corn as the etiological factor in pellagra.

A certain doctor in Ohio says: "Blind staggers in the animal is the same as pellagra in the human, caused in both by eating mouldy corn." It is hoped that he knows the cause of blind staggers, but the Notes would timidly suggest that he might be a little previous as to the cause of pellagra.

### WANDERING REMARKS

The hookworm crusade in Florida has been partially suspended to fight smallpox. Not that smallpox is so important a disease, for it is not. To show you that it is not, we have had only eleven hundred cases and nine deaths from it in the entire State in the year. But we have fifty thousand cases of hookworms and many deaths every year. Then



smallpox is completely preventable. Hookworms are nearly so, though not entirely. Smallpox has been discussed a thousand years—hookworms about ten years. We have known how to prevent smallpox a century—we are just learning how to prevent hookworms. Smallpox, it is true, can't be cured, while hookworm can; but it can, as before said, be prevented, which is infinitely better than cure. Then, in the name of common sense, why do we let up on the greater and more important disease to fight the lesser? I had not started to discuss smallpox but hookworms. The crusade is not stopped—as Bob Burdette would say, "not lost but gone behind something."

In fact the crusade against hookworms can't be stopped now. The time when it could has past. It has been set in motion, and it continues to move, gathering momentum as it goes, till at length it will attain a state of equilibrium. The State Board of Health has started it, but it couldn't stop it if it tried. A man can sometimes start a panic simply by crying "fire," but he can't stop the panic in the face of the fire. This hookworm work would go on if the State Board of Health were wiped out of existence. Just this morning a letter was received from one of the more important educational institutions of the State telling how the hookworm was described to the students and how they were then invited to submit specimens for examination, and how forty of them responded, and how twelve were found positive and took treatment.

The Board knew nothing of this till it was past. The Board paid for treatment of 600 cases last year—how many thousand were treated that the Board has never heard of can only be conjectured. The Board can furnish the ammunition—the people must fight the battle. And they are fighting it to a man. A wide and extensive acquaintance in the State—a corps of workers covering it minutely, has failed to bring to light in several months a single physician who is not recognizing and treating hookworms. There may be such—we would not say there are none, but we know of none, and our extensive acquaintance assures us that if there are such, they are few.

A feeble wail was heard the other day in the press about the condition of hookworm sufferers being starved and that being the cause of their condition. It sounded like one speaking from the dead. How vividly it calls to the mind of every Southern physician who has been practicing ten years his futile attempts to woo those little sufferers to health by nutritious diet, and tonics! How many of them he has seen laid away—literally starved on the best

diet that money could buy! I recall two children that were admitted to the hospital when I was interne. That was nine years ago. They were brother and sister, about eight and ten years old. And I remember the iron that I used to give them—the milk and egg diet, and yet the little sufferers kept sinking. I called the visiting physician to my assistance. But it was no use. The children had plenty of food—the best food—predigested food—but they couldn't assimilate it. Day by day their little pinched countenances grew more pinched—their little pale faces grew more pale—their little protruding abdomens protruded more and more, until finally the eyes were swollen in the morning, and then the whole face and the dropsy became general, and then the hearse took one and then the other. Preach food to me, ye gods! It was not an insufficiency of food, but a superfluity of worms. It was not milk and eggs they needed—it was thymol.

That was a long time ago—we know better now. Still here and there is one who hates to be dislodged from his former antagonistic position. They die hard. When the law of mosquito transmission of malaria and yellow fever was discovered, some said it was not so—could not be so, and held out for years and years. At last when they found themselves more and more alone, they began to recede—began to say the mosquito is only one of the ways. So in this. But that, too, will pass. No one denies that good food is essential to good health, and other things being equal those having poor food or insufficient quantity, will suffer most from the disease, just as those having poor clothes will suffer most from the cold. Yes, that's the proper figure—just as well to say the cold doesn't make people suffer—it is lack of sufficient clothes. The cases are fairly analogous.

However, there is nothing to quarrel about now. The mosquito is the only means of transmission of malaria and yellow fever, and everybody recognizes it. Or if there are some few that believe otherwise they don't dare open up about it except in the most private way when they can give vent to their feelings without being laughed at.

A certain little boy had scarlet fever. He said: "Daddy, can't you vaccinate against scarlet fever?" To which his father replied that he could not. Though the little fellow was not suffering from the disease, he was tired of the confinement. He sighed and said to himself: "I am vaccinated against smallpox, and against typhoid fever, and I had tetanus antitoxin when I stuck a nail in my foot. Daddy, I wish you could vaccinate against all the diseases." Ah, little boy, that wish has been made many times. Many a time has it wrung a mother's



heart, that vaccination even against smallpox was delayed till it was too late. Many a rain has drenched a bleak little grave while a mother's tears drenched a vacant little bed, that vaccination against smallpox would have prevented. Blessed is the little boy whose parents give him protection against all those treacherous diseases possible.

This morning I was asked about German measles in town. I replied I had seen none. But that I had a case of scarlet fever at my house. The conversation led me to relate the case in detail. The listener was a man of more than ordinary intelligence. He is not a physician. How much experience he has had with scarlet fever I do not know, but presume not a great deal. He assured me from the symptoms described that it was not scarlet fever.

That happens, by the way, every day. Half a dozen people that have not seen the case—only heard about it—are ready to testify that the child does not have scarlet fever. To the average layman nothing is easier than to diagnose scarlet fever, or diphtheria, or measles, or smallpox. And then the average layman will accept the diagnosis of the other average layman sooner than he will that of the physician who puts years of study to it, and adds to that years of experience. In this case two physicians, with ripe experience, found it difficult to determine whether it was scarlet fever, with the case and its full history at hand. But a layman, without any help, and without seeing the case, can make a diagnosis without the slightest difficulty. I often think of what mistakes have been made in the making of doctors. Why didn't some of the wise laymen study medicine—what couldn't they have done? I have heard that in China you place a handkerchief over the patient's face, and take it to the doctor and he makes a diagnosis. These Chinese stunts at diagnosis are not in it. What layman needs a handkerchief to diagnose scarlet fever?

The other day a card was received from a certain citizen, asking for some information on ground-itch, but stating among other things that "The crackers know more about ground-itch than the doctors do?" Scarlet fever is not the only disease that the doctors are not posted on.

A mother brought a sweet little girl of five into the office. She wore glasses, even at that tender age. But, alas! an impenetrable darkness had veiled those little eyes forever! Ah, little blind child! Two drops of simple medicine at the RIGHT TIME and thou wouldst today

be romping on the green as other children romp! The sky overhead, and moon and stars, the bird on the bough filling the air with animated music, the violet barely lifting its timid head above the sod, would not all look alike to thee! When morning calls thy little form to life, thy lips to speak, thy arms to fond embrace, thine eyes would also hither come from night to meet thy mother's own. Poor caged bird! Thou wouldst not beat thy breast against the wires in vain!

### SCARLET FEVER

There is, at the present time, a case of scarlet fever in the family of one of the attaches of the State Board of Health, that has two or three instructive phases.

The child, a boy of six, well grown and in good health, on Friday night complained that his throat was a little sore. Examination showed nothing but a little reddening. Saturday it had disappeared and the matter was forgotten. The boy romped and played through the day as usual. At bedtime it was observed that his face was flushed. When he went to take his bath it was found that his body was covered with a scarlet eruption. Suspecting scarlet fever, the child was placed in a room to himself. Sunday morning the rash had faded, though it was faintly visible here and there. No throat symptoms. Temperature 99°. The only symptom that was pronounced at this time was hunger. He was kept in bed all day. But he was so full of life that he would occasionally get to jumping and rolling and kicking for the fun of it. At such times his face would flush more than usual, and the scarlet rash would come out enough to be seen. Monday morning about the same suggestion of eruption that had existed the day before. No throat symptoms. There was slight eruption on hard palate. Asked how he felt, he answered: "All right I suppose. I haven't thought about my feelings." At this time a diagnosis of scarlet fever was made.

The first point of special interest is the unusual mildness of it. Had the case occurred in a less observant family it would have been passed by as of no consequence, and the child would never have stayed in doors a minute from it. Perhaps he would have gone to school, or to Sunday School, or down town, or to a children's party, or on a trip—anywhere occasion called for. It will be seen how he would have exposed others indiscriminately and without the knowledge of any one. And thus would it have spread, and many would be wondering a week hence, just as we are wondering about him now—where did he get it?



And that is the second item of interest. He is not known to have been exposed. At home he has the privilege of a large yard, but not of the street. He has no playmates visit him. No one in the house is known to have seen a case of scarlet fever in several weeks to say the least. None is known to have existed in the family of the washer-woman. But,

Just a week before he was taken ill, he went down town one afternoon with his mother. They went into two or three jewelry stores and into one department store. They went and came on the cars. It may be that he came in contact with some other child that had a slight sore throat and that had been forgotten about. No one will ever know. But the fact remains he got scarlet fever.

There is a third point that is being emphasized a great deal now, and that is "contact infection." That is to say scarlet fever is not considered air-borne but that it is borne only by contact. Dr. Guiteras emphasizes this very strongly. He quotes a certain French physician that declares he can treat scarlet fever in a ward with other patients with safety if he only observes certain precautions. He does it by first having a coarse wire cage set over the bed of the scarlet fever patient. That is merely to mark the "dead-line," so to speak. No one enters this cage except the nurse and physician and they put on a gown on entering and take it off on coming out and wash the hands also with a disinfectant solution. In other words strict surgical precautions are observed.

In the home management of this case there is no wire cage but a "dead-line" is just as effectively drawn as if there were. The bed is moved away from the wall so as to give room to pass round it. The nursing table is set close to the bed. There is a small rug on the floor beside the bed. The bed, and table, and rug, constitute the infected territory. The rest of the room is not considered infected. Nothing goes into the infected territory and comes out without disinfection. When the nurse, who is the mother in this case, goes to fix the bed, she dons a nursing apron, which covers her from head to foot, protecting her clothes entirely. Upon leaving she takes this off and hangs it upon the foot of the bed, infected side out, and washes her hands in solution of bichloride of mercury which is set ready. No linen is taken out of infected territory without first being immersed in water, and it is immediately boiled. In this way it is believed the purpose of sanitation is fulfilled as completely as possible, that is to say, the maximum of protection is given with the minimum of inconvenience.

A very important item in the management of communicable disease is the general training the child has. One that is rebellious and uncontrollable when well will be more so when sick, and nothing will complicate the management of a communicable disease more than inability to control the patient.

The quotation this month, which as usual appears on the title page, and the letter from Thomas Jefferson to Edward Jenner, are reproduced from the August, 1910, issue of the California State Board of Health Monthly Bulletin, which was devoted entirely to a discussion of vaccination.

### THOMAS JEFFERSON'S LETTER TO EDWARD JENNER

MONTICELLO, VA., May 14, 1806.

SIR: I have received a copy of the evidence at large, respecting the discovery of the vaccine inoculation, which you have been pleased to send me, and for which I return you many thanks. Having been among the early converts of this part of the globe to its efficacy I took an early part in recommending it to my countrymen. I avail myself of this occasion to render you my portion of the tribute and gratitude due to you from the whole human family. Medicine has never before produced any single improvement of such utility. Harvey's discovery of the circulation of the blood was a beautiful addition to our knowledge of the ancient economy; but on a review of the practice of medicine before and since that epoch, I do not see any great amelioration which has been derived from that discovery. You have erased from the calendar of human afflictions one of its greatest. Yours is the comfortable reflection that mankind can never forget that you have lived; future nations will know by history only that the loathsome smallpox has existed, and by you has been extirpated. Accept the most fervent wishes for your health and happiness, and assurance of the greatest respect and consideration.

THOS. JEFFERSON.

### BILLBOARDS WILL TEACH TUBERCULOSIS PREVENTION

20,000 Colored Posters to be Displayed in Next Three Months—  
Value \$100,000

During the next three months, the billboards of the United States will display 20,000 educational posters on tuberculosis, according to an announcement made today by the National Association for the Study and Prevention of Tuberculosis.

This will conclude the campaign begun a year ago, when the National Billposters' Association donated free space to the tuberculosis



cause, the Poster Printers' Association offered free printing, and nine paper manufacturers gave the paper for the posters. The combined value of these several donations for this three-month campaign is nearly \$100,000.

The posters are in six different designs and are all printed in three colors. They are 7 feet wide and 9 feet high. Already nearly 2,500 of these posters have been hung on the billboards of 46 different cities, and it is planned to distribute 20,000 before April 1st in over 400 towns and cities. Any anti-tuberculosis society in the United States may receive free of charge, except for transportation, as many of these posters as can be hung on the boards in its territory. The National Association with the Tuberculosis Committee of the National Billposters and Distributors are conducting the campaign.

The posters show in graphic form how fresh air, good food, and rest cure tuberculosis; how bad air, overwork, and closed windows lead to consumption; and how the careless consumptive menaces the health of his family by spitting on the floor.

## DIPHTHERIA

### Helps in the Management of Diphtheria Recommended by the State Board of Health

Diphtheria is due to a very small vegetable, known as a germ. These plants or germs don't grow in ordinary soil. But they grow well where conditions suit them.

They grow best in the throat of human beings—particularly children. When they grow in a child's throat they produce the disease we know as diphtheria.

If by any accident, some of these germs get transferred from the throat of a diphtheria case to that of a well child, they begin to grow and produce another case of diphtheria.

Good management of diphtheria has for its object the prevention of other cases. This is accomplished in two ways: 1st, by preventing any germs from the sick getting to the well; and 2d, by immunizing the well so they will not develop diphtheria even if they do happen to get a few germs.

A case of diphtheria in a family of children should therefore be managed as follows:

1st. As soon as a child complains of sore throat the family physician should be called. It may be diphtheria. If it is:

2d. The sick child should have a large dose of antitoxin at once. The doctor will attend to this.

3d. Then the other children in the house should have immunizing doses of antitoxin. The doctor will attend to this also.

4th. The sick child should then be kept in a room to itself, and should be seen by as few people as possible—if only the doctor and nurse so much the better.

5th. All carpets, rugs, etc., should early be removed from the sick room.

6th. The doctor's advice should be carried out in detail.

7th. If the mother acts in the capacity of nurse, she should not turn this duty over to anyone else, and should mingle as little as possible with others.

8th. All eating utensils used by the patient should be taken from the sick room in a dishpan and have boiling water poured over them and be left to stand fifteen or twenty minutes.

9th. All bed linen, night gowns, and washables of every kind should be removed from the sick room in a zinc pail and be covered with boiling water, or better still, set on the stove and allowed to boil fifteen minutes.

10th. When the case is dismissed the room should be carefully cleaned—disinfected by the local Board of Health.

Remember:

That diphtheria antitoxin cures diphtheria if administered early, hence the importance of calling the family physician early in the disease.

Remember:

That diphtheria antitoxin prevents diphtheria if given in immunizing doses, just as vaccination prevents smallpox. But the immunity lasts only a short while—two to four weeks. This, however, gives time to get the patient up.

The State Board of Health will pay for antitoxin used with indigent patients.

When diphtheria is seen early, and well managed, there is rarely a death from it, and only one case to the family.

When managed as above outlined, it is not necessary to apply quarantine restrictions to anyone but the patient and nurse. That is to say, the well children should not be excluded from school, provided, of course, that they are excluded from the sick room.

### JUST A JINGLE

A walk of a mile in the open air  
Will save you more than your nickel fare,  
For in God's outdoors the air is good;  
It will clear your brain and redden your blood  
And bring you more vigor and health by far  
Than you can possibly get in any old car.  
—*Sanitary Bulletin Department of Health, City of Chicago.*

### LIFE'S SEESAW

Gin ye find a heart that's weary,  
And that needs a brither's hand,  
Dinna thou turn from it, dearie;  
Thou maun help thy fellowman.  
Thou, too, hast a hidden heartache,  
Sacred from all mortal ken,  
And because of thine own grief's sake  
Thou maun feel for ither men.

In this world o' seesaw, dearie,  
Grief goes up and joy comes down,  
Brows that catch the sunshine cheerie  
May tomorrow wear a frown.  
Bleak December, dull and dreary,  
Follows on the heels of May.  
Give thy trust unstinted, dearie,  
Thou mayst need a friend some day.  
—*"Heart Throbs," in the National Magazine for December.*

### VENTILATION

"Nothing is more important than to keep out of badly ventilated places. A badly ventilated place in which many people are crowded is the worst place, especially if it is warm and damp. Did you ever go out of the snow into a hot waiting-room jammed with people and with all the windows closed? The next time you find yourself in a place like that, get out. Get where the wind can blow the air from around you. Then—avoid warm, close, damp, crowded places.

"The next time you go into a place where the air is still and quiet, where no drafts are felt, notice how quickly you become heavy, loggy, yawny, and then get a headache. On the other hand, a breeze in summer or winter stimulates you; does it not? Drafts are invigorating. Lack of drafts is depressing. A cold bath may not be so comfortable as a hot bath, but it is much healthier for the average person. Draftier places are healthier than places without drafts. There is less

pneumonia in them. Some one says to chill your feet or to wet your feet will give you cold. Keep tab on these points. Every time your feet get cold mark it down and see how often you get a 'bad cold.' Do the same things every time your feet get wet. Keep the same tab on your colds and see whether you think cold or wet feet has anything to do with 'taking cold.'

"You will find that your ideas about cold feet, or wet feet, or drafts, have been more wrong than right.

"Then—do not dodge drafts; do not avoid fresh air; be temperate; keep your body right, and then if you crowd up against your neighbor on car, platform or elsewhere, do it in the open, blowing air where you can't hurt him and he can't harm you."—*Chicago, Sanitary Bulletin, Department of Health.*

### SHOULD SMALLPOX BE QUARANTINED?

"Here, I wish to go on record as opposed to the present method of handling smallpox. I am opposed to the quarantine of smallpox, and my disapproval of this practice rests upon the following reasons:

"First—Because quarantine gives a false sense of security, thereby tempting many who would otherwise be vaccinated to forego this certain protection. Quarantine in this way favors the substitution of an uncertain for a certain protection. Example: A victim of smallpox turns up in the town of X. The first thought in many instances is to conceal the case; if this fails, it is conspicuously stated that the disease is safely quarantined. In either case, the unvaccinated population, either ignorant of the existence of the disease, or relying upon the quarantine, take no precaution. The fuel upon which the disease blazes into an epidemic remains without protection. On the other hand, suppose that when the case turns up in X it is boldly announced and placarded. It is at the same time understood that no quarantine will be established; that the disease may tomorrow be met in the post-office, courthouse, market place, school, church or other public place; then nearly everybody will be vaccinated, and there will be but little smallpox fuel to keep the disease smoldering.

"Second—I said 'nearly everybody' would be vaccinated. Who, then, will make the small minority? Two classes of people: The first class are those whose sense of responsibility for community health is such that they are more influenced by the anticipated slight personal discomfort of a sore arm than they are influenced by considerations of the public weal. The second class are our esteemed friends who do



not believe in the protective power of vaccination. To these science is dumb and experience is a liar. And yet to protect these two classes, we quarantine. To protect them, when they alone last year spread the disease all over our fair State and put the State to an expense of \$40,000 to \$50,000. Do these civic irresponsibles deserve an altogether unnecessary expenditure of \$50,000 by those who have discharged their civic obligation in the matter of smallpox? My answer is, No.

"Third—Minnesota and South Carolina have both abolished quarantine in smallpox and the result has been highly satisfactory to both States. Their experience indicates that there are fewer cases without quarantine than with it. Minnesota, in 1907, when she quarantined the disease, had 1,535 cases; the next year, without quarantine, there were 473 cases, and in 1909 there were only 269."—*Extract from the 1909 annual report of the Secretary of the State Board of Health of North Carolina, published in The Bulletin.*

### DANGERS EXAGGERATED

"Mr. Bonner had tried to make out that vaccination was fraught with great danger. Even if vaccination could be proved to be a really dangerous operation, that would not affect the argument as to its efficacy in preventing and mitigating smallpox. The alleged dangers had been grossly exaggerated, and he (Dr. Drury) had exposed many of the fables of the anti-vaccinators, and shown them to be baseless fabrications or gross exaggerations. Some of these fables had appeared in the *Vaccination Inquirer*. 'I don't believe in vaccination,' said a man to his friend. 'My nephew died two days after he was vaccinated.' 'From the effects of it?' asked his friend. 'No, he was run over by a train,' was the reply. That was an American yarn, but it illustrated the want of relationship between cause and effect in many of the allegations against vaccination.

"In Halifax, during a number of years of great neglect of vaccination, a very useful lesson of correction had been taught to hundreds of parents who imagined their first child had been injured and skin disease introduced by vaccination. 'Never again,' said many of them, and in some cases photographs were taken by local anti-vaccinators. What has happened since? Other children had been born in the same family, vaccination had been rejected, and yet later children had suffered from precisely the same condition (only worse in some of the cases) as had afflicted the vaccinated first born. He had been asked to vaccinate children in a number of such families during recent years,

the parents having abandoned their former opinion. The same applied to certain joint affections and numerous other diseases alleged to be caused by vaccination."—*The Medical Officer, England, November 19, 1910.*

More than 1,100 British medical officers of health had signed a manifesto saying that while they gave due weight to the value of sanitation they believed the only trustworthy protection known against smallpox was vaccination and revaccination. These medical officers of health have no pecuniary interest in vaccination. \* \* \*

Dr. Drury referred to the kind of isolation practised in Germany where smallpox cases were treated in the general hospitals, the vaccination and revaccination of the nurses, attendants and patients being relied upon as sufficient protection.—*The Medical Officer, England, November 19, 1910.*

### NATIONAL TUBERCULOSIS DAY ON APRIL 30

Churches Will Fight Consumption or Hope to Enlist  
33,000,000 Communicants

April 30th has been set aside this year as "Tuberculosis Day," and will be observed in 200,000 churches in the country in a manner similar to that of "Tuberculosis Sunday" in 1910, when over 40,000 sermons were preached on the prevention of consumption. In this first official announcement of the occasion made by the National Association for the Study and Prevention of Tuberculosis, the leaders of the movement state that they hope to enlist all of the 33,000,000 church members in the country.

In one respect Tuberculosis Day will differ from Tuberculosis Sunday of 1910. Instead of requesting the churches to give to the tuberculosis cause a special Sunday service, the National Association is going to ask this year that meetings, at which the subject of tuberculosis and its prevention can be discussed, be held on Sunday, April 30th, or on any other day near that date, either in the week preceding or the week following. "What we want," says Dr. Livingston Farrand, Executive Secretary of the National Association for the Study and Prevention of Tuberculosis, in a report on this movement, "is to have this whole subject of tuberculosis discussed in all of the 200,000 churches of the United States at as nearly the same time as possible.

This does not mean that a stated service must be given over to this work, though that might be desirable, but that any minister, or other authority whom he may invite, can present the problem to his congregation before or after his regular service, or on any day within the week preceding or following April 30th."

The National Association is planning to gather statistics from thousands of ministers, showing how serious a problem tuberculosis is to every church. These figures will show among other things the number of deaths last year from tuberculosis in the church congregation, and the ways in which the pastors are called on to minister to sufferers from this disease. It is planned also to issue millions of circulars and pamphlets on the prevention of tuberculosis, both from the national office and from the headquarters of the 450 anti-tuberculosis associations which will cooperate in the movement.

### THE ANTI-VACCINATIONISTS' STANDPOINT

(Extracts from article by Dr. Saxton Pope, Watsonville, Cal., published in the *Monthly Bulletin of the California State Board of Health* for August, 1910.)

"While it is true that most of the opponents of vaccination are intelligent persons, and some are men of distinction, it is also true that none of them is trained in biologic science. It is frequently claimed that doctors disagree regarding vaccination, but this is not so. All men of modern medical training know that vaccination not only has saved more human lives than any other discovery, but that it is the foundation of modern medicine. It started the production of artificial immunity through antitoxic serums, bacterial vaccines and similar agents. The theory and principles of vaccination underlie the whole scheme of the prophylaxis and cure of contagious and infectious diseases. The prevention or cure of such diseases as plague, diphtheria, tetanus, cerebro-spinal meningitis and typhoid fever depends upon vaccine theories. The statistics quoted by the anti-vaccinationists are selected in a strange way, and at times are used illegitimately. And where authorities are quoted to damn the procedure, these men generally are dead and buried many years. No man who has attained any eminence in medicine in modern times can be quoted against vaccination."

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# FLORIDA Health Notes



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Anything you want to know about the public health we will try to tell you.

Any information you want about communicable diseases of domestic animals we will help you to get.

The individual that is successfully vaccinated is as safe against smallpox, as an asbestos house against fire.



### A WORD ABOUT VACCINATION

There is a popular belief, based, however, on false conclusions, that a large scar on the arm or leg as a sequence of the vaccination act is protective and is ample evidence of successful vaccination. The NOTES wishes to say to its readers and to the people of Florida generally, that a large scar is evidence only of a brutal scarification which through some cause, may be negligence as to cleanliness on the part of the person scarified, or from some untoward source, may have become infected by bacteria of the air, converting a simple operation into an ulcerated surface destructive alike to tissue and probably to the protective principle which is the factor of vaccine. On this account instances are cited where vaccinated persons (?) are said to have been stricken after exposure to smallpox, and thus the anti-vaccinationists' claim to have scored a point. It may be laid down as an aphorism of vaccination that a scar which has not a star-shaped appearance (stellated, it is called) "is no good" and should not be accepted as proof of a successful vaccination. Remember, then, that a large irregular-shaped scar is not to be taken as evidence of a successful vaccination. It is greatly in evidence of some one's ignorance of the art of vaccinating. There is neither sense nor good reason, which, by the way, is good sense, that a vaccination scar should be larger in size than an old three-cent piece is in diameter—nor so large. A scarification of about the size of a large pin's head with the virus well rubbed in is capable of full protection. After a few minutes' drying the scarified spot should be protected by absorbent cotton held in place by a narrow strip of rubber adhesive plaster, and let alone for several days. The scabs when formed should be kept intact. Nothing more is needed. Place no dependence of immunity to smallpox on large scars, said to be vaccination. They are delusions of faith and a snare for some one to catch smallpox when exposed to that disease.

### THE VALUE OF TERMINAL DISINFECTION

The following article by Dr. Chas. V. Chapin, Superintendent of Health, Providence, R. I., taken bodily from the *Journal of the American Public Health Association* for January, 1911, so fully and so conclusively represents the trend of opinion with reference to terminal disinfection that it would seem an injustice to abstract it or otherwise mutilate it. It is accordingly given in Dr. Chapin's own words and is heartily commended to the careful consideration of any person interested in public health:

Terminal disinfection is a matter the importance of which is perhaps best emphasized by its cost. The following shows the expense of disinfection for five Eastern cities for the year 1908:

Boston .....	\$20,123.49
New York .....	55,369.41
Philadelphia .....	24,115.75
Baltimore .....	6,603.78
Washington .....	5,786.00

The value of such an expenditure ought to be carefully considered, and, as has been urged by Rickards before this association, we ought again to study the efficiency of the methods and the necessity for the procedure.

Several considerations have led to a questioning of the importance of terminal disinfection. The first in point of time was the fact that the introduction of the procedure, and an increasing rigor in its application, and increased efficiency in methods, was not followed by a decrease in the prevalence of scarlet fever and diphtheria, the diseases for which it was chiefly employed. Thus, in Providence, after we had developed and applied methods of disinfection by steam, formaldehyde and corrosive sublimate, we had the most extensive outbreak of diphtheria which had occurred in fifteen years. Such an experience is far from unique and other failures of disinfection will later be noted.

We are coming to see that the contagious diseases are not as contagious as was formerly believed. It often happens that a case remains for weeks in a family without infecting others. In the average family with scarlet fever, the chance of children, even at the most susceptible age, contracting the disease is only one in three; for the adult males it is only one in fifty. The danger from infected things is manifestly far less than the danger from infected persons. In the latter the germs are continuously developing in enormous numbers, while on the former they are rapidly dying. There is no need of emphasizing to this audience the fact that the pathogens do not grow outside of the body.

A study of the extension of scarlet fever and diphtheria from one family to another in the same house indicates that fomites are of very much less importance in the transmission of disease than we formerly thought. A large series of observations in Providence show that such an extension occurs in only about six or seven per cent of the exposed families. Most of this secondary infection occurs before the disease is recognized, or among families known to have visited the infected household. If there is no communication between the families there is practically no extension of the disease. Yet in most tenement houses the well members of the infected family, many of whom, in diphtheria at least, are known to be carrying virulent bacilli, are using the same doors, hallways, stair-rails, cellars, water-closets, etc. All these parts of the house ought, according to current views, to be effective bearers of disease germs, yet they are shown to be in nowise dangerous. Many articles which ought theoretically to be most potent sources of infection, as money, rags, and second-hand clothing, have been shown to be practically innocuous.

The theory of infection by fomites never had any but the flimsiest basis in observation or experiment. It is true that instances are reported of possible infection by fomites in scarlet fever, diphtheria and measles, but though in the aggregate they are considerable in number, they are alleged for only an in-



infinitesimal portion of the reported cases. No one has ever seriously attempted to estimate what proportion of cases are traceable to fomites. In the alleged instances of fomites infection there is almost never any real evidence that the disease is caused in the manner stated. There is usually only a possibility, rarely even a probability, and a demonstration would be almost unique. In the supposed transmission of disease by fomites, persons also are usually involved, either as the bearers of the things or otherwise, and persons are far more likely to be the bearers of the germs than are the things. Which is the more likely to cause the recurrence of diphtheria in a house, bacilli dying upon the walls and furniture, or propagating in throat and nose of convalescent or carrier?

The theory of infection by fomites, like the theory of infection by air, was purely a *priori* theory. To determine the sources of cases of contagious disease is usually impossible. There is not generally any direct and obvious connection with previous cases. Hence from remote antiquity fomites have been believed to be one of the chief factors in the extension of disease. Whatever its origin, the theory of infection by fomites has been maintained because it afforded the only explanation of the phenomena of disease extension. If other and better explanations are at hand this theory may be questioned, and it should be abandoned unless its advocates can substantiate it by observation and experiment. The burden of proof rests on those who would maintain the theory, not on us who question it.

It is now no longer necessary to assume the agency of fomites in the transmission of these diseases. Contact infection is the most obvious mode of extension, and though we know that contact between the well and the really sick does not usually take place, we do know that there is ample opportunity for the most direct contact between the general public and convalescent or other healthy carriers of disease germs. These unknown sources of infection are so numerous that most recognized cases may well be due to direct contact with them. We no longer have any difficulty in explaining the source of contagious diseases, the wonder rather is that there are not more cases. If infection by fomites were as effective as is supposed, there would be far more contagious disease than there is. The number of unrecognized human foci affords no room for infection by fomites.

The foregoing considerations, and others to be mentioned, had already led the writer to question very seriously the agency of fomites in the spread of disease, when the wonderful work of the American Yellow Fever Commission showed beyond question that yellow fever is never carried by fomites. I had always believed that if any disease was fomite-borne it was yellow fever. The evidence of its transmission by clothing, bedding and merchandise was stronger than for any other disease. Yet all this evidence was shown to be worthless. Was it not time to ask how often scarlet fever is carried in clothing, or how often diphtheria germs linger on the walls of a room?

The earlier findings of bacteriology seemed to support the theory of infection by fomites. It was learned that many bacteria, even those of the non-spore-forming kinds, have at times considerable powers of resistance. Bacilli of tuberculosis, of diphtheria, of typhoid fever and others, were shown to survive, under some conditions, for many months. It was even thought that they might under favorable circumstances propagate outside of the body. It is even

now no rare thing to hear health officers in good standing mislead the public by making statements that damp and ill-lighted houses are favorable for the growth of the tubercle bacillus. But we now know that the common disease-producing bacteria are not saprophytes. We know that instead of growing outside of the body they begin to lose their virulence and die almost as soon as cast off. The tendency of recent work is to show that pathogens are not so resistant as was formerly thought.

But the most important point is that most of the studies on the resistance of bacteria have not been quantitative, and many have failed to recognize that the virulence of germ often disappears before their death. We should realize that while a few germs may survive perhaps for weeks, most of them die in a few days. Houston showed that while some typhoid bacilli could be recovered from London tap water up to eight weeks, 99.9 per cent perished in one week. The survival of such a small percentage of pathogenic bacteria in water appears to be little dangerous; in the air it would probably be still less dangerous. Hill has suggested, and probably correctly, that the reason why tubercle bacilli, which are less resistant than diphtheria bacilli, are more often recovered from fomites than are the latter, is simply because the tubercle bacilli are discharged in such very much greater numbers that more of them have a chance of survival. The life of some pathogens, as the germs of pneumonia, influenza, gonorrhea and cerebro-spinal meningitis, is so restricted that fomites can certainly be of no moment in the extension of these diseases.

Of rather more interest, though by no means conclusive, is the field work of the bacteriologist. The researches of Cornet and a host of followers have shown that tubercle bacilli are quite commonly found in considerable numbers in the apartments of careless consumptives. Search for diphtheria bacilli has not, for the reason given above, been nearly so successful. Out of towards fourteen hundred swabbings taken from supposedly infected rooms by Schumberg, Weichardt, Hill, Gorham and Kober, diphtheria bacilli were found only about a dozen times and only on such objects as handkerchiefs, toys and drinking glasses.

After all, however, bacteriological evidence can not be conclusive. Although virulent bacteria may be found to some extent on objects supposed to act as fomites, they may not be an appreciable source of danger. Pus-forming bacteria are found in the air of operating-rooms, but the surgeons no longer sterilize the air as was at first supposed by Lister to be necessary. The epidemiological arguments previously considered have seemed to quite a number sufficient reason for seriously questioning the importance of fomites infection and the value of the usual routine terminal disinfection. To the writer there seemed little warrant for disinfecting after deaths from tuberculosis, which is supposed to be by most health officers and secretaries of anti-tuberculosis leagues such an important prophylactic measure. If, as the phthisiologists tell us, there is no danger in living with a careful consumptive, there can be no danger in living in his house after he is dead. Or, if a consumptive has been careless all through his sickness his family will gain no security by the rite of disinfection after his demise. If a careless consumptive dies or removes, it is, according to our present knowledge, desirable that his apartments should be cleaned, or disinfected if you will, before they are occupied by others, but to disinfect after every death, as has been



urged, has only resulted in focusing popular attention upon a very unimportant source of the disease.

But it is after diphtheria that the present practice of terminal disinfection seemed most unwarranted. There certainly can be no use in trying to destroy the few dangerous bacilli which theoretically may remain in the apartment occupied by a diphtheria patient, unless we can be reasonably sure that he and the other members of his family are not growing the bacilli on their mucous surfaces. This certainly we can not be sure of unless at least two successive negative cultures are obtained from throat and nose. Indeed, owing to the limitations of this bacteriological test, it is highly probable that even after two negative cultures the chance of the bacilli still persisting in throat or nose is much greater than it is that they persist on the walls and furniture. As such an onerous requirement as cultures from the whole family before release from isolation is impracticable, it was decided in Providence to abandon terminal disinfection, except under the conditions named, and this was done in March, 1905. An additional reason for this step was that the ordinary methods of disinfection are not reliable, and, as suggested by Rickards, we ought either to give up disinfection or really to disinfect. In Providence we chose the former. No unfortunate effect seems to have been produced on the prevalence of diphtheria. After the practice was abandoned in March the cases began to fall off until at one time in August there was not a reported case in the city. Again in August, 1908, the disease was reduced to a single case. It is true that we have had an extensive outbreak since disinfection was abandoned, but it was scarcely half as severe as one in Worcester at almost the same time, and though we have had more diphtheria during the last few years than some cities, it has been substantially the same as in the nearby city of Boston.

The amount of recurrence of the disease in the family is generally believed to be a measure of the value and success of disinfection, though it seems to me probable that practically all such recurrences are due to infection from carriers in the family. This is strongly suggested by the fact that recurrences after the return of patients from the hospital are about as frequent as they are after the removal of the warning sign in home-treated cases. For the benefit of those who lay stress on the importance of recurrences, the following figures from the experience of Providence are given:

#### PROVIDENCE.

The number of recurrences after disinfection, the number of infected families and the rate of recurrence during the years 1902 and 1905 was as follows:

#### DIPHTHERIA, 1902-5.

Year.	Infected Families.	Recurrences.	Rate
1902.....	358	6	1.67
1903.....	453	7	1.54
1904.....	559	10	1.78
1905.....	87	2	2.30
Total.....	1,457	25	1.71

The number of recurrences since February, 1905, where there was no disinfection, and the ratio to infected families where there was no disinfection is as follows:

#### DIPHTHERIA, 1905-9.

Year.	Infected Families.	Recurrences.	Rate.
1905.....	258	4	1.55
1906.....	259	4	1.55
1907.....	343	7	2.04
1908.....	687	17	2.34
1909.....	472	10	2.12
Total.....	2,019	42	2.08

There is certainly nothing in these figures to suggest danger from abandoning disinfection. The difference in favor of disinfection is not greater than the margin of error. It is interesting in this connection to compare the recurrences in Providence, where there is no disinfection, with the recurrences in Baltimore where disinfection is done and carefully checked by test cultures.

#### RECURRENCES AFTER DIPHTHERIA.

Ratio of recurrences within sixty days, in house, to number of reported cases.

#### BALTIMORE.

Year.	Cases.	Recurrences.	Per Cent.
1903.....	1,096	20	1.82
1904.....	1,241	18	1.45
1905.....	962	17	1.77
1906.....	1,172	22	1.87
1907.....	867	21	2.42
1908.....	837	10	1.19
1909.....	756	14	1.85
Total.....	6,931	122	1.76

#### PROVIDENCE.

##### DISINFECTION.

Year.	Cases.	Recurrences.	Per Cent.
1902.....	530	8	1.51
1903.....	706	7	0.99
1904.....	780	19	2.44
1905.....	140	2	1.43
Total.....	2,156	36	1.67

##### NO DISINFECTION.

Year.	Cases.	Recurrences.	Per Cent.
1905.....	422	5	1.18
1906.....	407	6	1.47
1907.....	570	7	1.23
1908.....	917	17	1.85
1909.....	639	3	0.47
Total.....	2,955	38	1.28

In order to make the Providence figures comparable to those of Baltimore, it was necessary to include recurrences in other families in the house as well as in the family first invaded, and to calculate the percentage on total cases rather than on invaded households. As for the invasion of other families in the house after removal of the warning sign from the first family, it was in Providence, when there was disinfection 1.2 per cent. of 851 families, and when there was no disinfection 0.4 per cent. of 1,679 families.

Another possible method of testing the value of disinfection is to note how often well persons removing from the infected family during the course of the disease are taken sick on their return. In Providence, since disinfection was abandoned, of 585 persons, of whom 510 were under twenty-one years of age, who thus went away from home, only one was taken sick after return, or 0.18 per cent. Previous to the abandonment of disinfection there were 9 attacks among 1,055 persons, or 0.85 per cent.

There is nothing in these experiences to indicate that there is any appreciable value in the practice of routine terminal disinfection after diphtheria. So evident is this and so similar, from an epidemiological standpoint, are scarlet fever and diphtheria, that we have been gradually abandoning disinfection after the former disease also. The following shows the recurrences where there was and where there was not official disinfection:

#### PROVIDENCE.

The number of recurrences after disinfection for scarlet fever, the number of infected families, and the rate of recurrence during the years 1905 to 1908 was as follows:

##### SCARLET FEVER, 1904-9.

Year.	Infected Families.	Recurrences.	Rate.
1904.....	868	12	1.38
1905.....	298	2	.67
1906.....	398	9	2.26
1907.....	540	8	1.48
1908.....	273	3	1.09
1909.....	52	3	5.77
Total.....	2,429	37	1.52

During the last two years the recurrences where there was no disinfection were as follows:

##### SCARLET FEVER, 1908-9.

Year.	Infected Families.	Recurrences.	Rate.
1908.....	40	1	2.50
1909.....	377	10	2.65
Total.....	417	11	2.64

The next table shows the number of recurrences in Baltimore and Providence, comparable data being employed as in the table for diphtheria:

##### RECURRENCES AFTER SCARLET FEVER.

Ratio of recurrences, within sixty days, in house, to number of reported cases.

#### BALTIMORE.

Year.	Cases.	Recurrences.	Per Cent.
1903.....	1,224	10	0.89
1904.....	1,222	21	1.72
1905.....	615	12	1.95
1906.....	577	7	1.21
1907.....	436	11	2.52
1908.....	1,262	17	1.34
1909.....	456	6	1.31
Total.....	5,792	84	1.44

#### PROVIDENCE.

##### DISINFECTION.

Year.	Cases.	Recurrences.	Per Cent.
1904.....	1,220	23	1.88
1905.....	454	6	1.32
1906.....	615	12	1.95
1907.....	809	10	1.24
1908.....	389	3	.77
1909.....	75	3	4.00
Total.....	3,562	57	1.60

##### NO DISINFECTION.

Year.	Cases.	Recurrences.	Per Cent.
1908.....	52	1	1.92
1909.....	552	16	2.90
Total.....	604	17	2.81

Both theory and the facts, so far as any data are available, indicate that terminal disinfection after diphtheria and scarlet fever is of no appreciable value. Much of the disinfection after tuberculosis also is useless. The feebleness of the germs of influenza, cerebro-spinal meningitis and pneumonia indicate that fomites can have no part in the extension of these diseases, and that disinfection is unnecessary. In all diseases in which the carriers and missed cases are very numerous, or in which the patient is infectious and about, during the prodromal stage, terminal disinfection can accomplish nothing and for this reason alone it is useless after the diseases just named, and also after measles and whooping-cough. Disinfection after measles, which was practiced in Ayrderdeen for twenty years, had no influence on the prevalence of the disease, neither did the adoption of this practice in New York, and its omission for a time in 1908 was without effect. There is no evidence that disinfection after cerebro-spinal meningitis in New York had any influence in checking the disease.

These views in regard to disinfection are not local merely, but have been developing independently in the minds of many. Several leading French physicians have stated that compulsory disinfection has not lessened contagious diseases in Paris. Comby is emphatic in his contention that it is persons, not things, which are the bearers of infection. Lemoine has shown that the dis-



infection of hospital rooms is not necessary to prevent the development of contagious diseases. In England Richards says terminal disinfection after diphtheria is of very little importance, and Barlow, Butler, Hogarth and other health officers have ceased to regard disinfection as essential. The disinfection of schoolrooms, periodically, as well as after the occurrence of contagious disease, has been urged by many besides the makers of disinfectants, especially in England, but most of the health officers have refused to be led by the clamor, and Kerr, the chief medical officer of schools in London, has clearly set forth the reasons why the rooms can rarely be at fault in school outbreaks of the contagious diseases.

While there is no evidence that fomites, as the term is generally understood, have an appreciable part in the spread of contagious diseases, there can be little doubt that much of what is properly called contact infection is mediate, and is due to the transfer of fresh infective material on inanimate objects. This mode of infection is to be combated by employing as scrupulous cleanliness as possible in the care of the patient. Plenty of soap and water daily on the things directly in contact with the patient, and on the hands of the nurse will do much to prevent the spread of disease in the family. Terminal disinfection does nothing and in a large degree withdraws attention from the importance of contact infection and the necessity for personal cleanliness. It is chiefly for this reason that the routine practice of terminal disinfection is objectionable. It is not a harmless custom, but it is a powerful factor in focusing attention upon unimportant modes of infection. Moreover it costs money. In Baltimore, for instance, the expense is \$6,000 per annum. A good visiting nurse can be obtained for \$1,000 and six such nurses could accomplish a world of good in assisting in the care of the sick and instructing, by precept and example, in methods of cleanliness in the management of contagious diseases.

It is not claimed that thorough terminal disinfection is never necessary. When a new or comparatively rare disease invades a locality, it may at times be desirable to take extraordinary precautions to prevent its extension, precautions which would be entirely useless if the disease were established. If a case of smallpox should occur in a city which has been free from it for years, it would be worth while, perhaps, to expend considerable time and money in disinfection, even though the chance of infection from the room or goods might not be one in a thousand. But if there were hundreds of cases of measles in the city, it would be folly to go to the same trouble and expense for each case, even if the chance of infection were ten times as great. A spark in the dry grass should be stamped out at any cost, but it is useless to waste time in extinguishing the smoldering flames left here and there as the line of fire is sweeping across the prairie.

### PROGRESS IN PUBLIC HEALTH EDUCATION

A few weeks ago one of the foremost weekly magazines of the United States, speaking editorially in regard to the fight between the police and anarchists in London, said among other things: "Nobody, we believe, now pretends that there was ever a moment when the anarchists could possibly have inflicted a tenth part as great damage upon society as the little housefly inflicts every day;" and again: "Get-

ting excited about anarchy when people who may be infected with tuberculosis still spit in public places seems to us a sad misdirection of energy."

The above would indicate that the efforts of the boards of health, tuberculosis associations, civic federations and other bodies in fighting the housefly and tuberculosis are reaping good results.

But it is difficult to understand the following in this connection. On January 26th one of the weekly papers of Florida (its name need not be mentioned) said in its news column: "The tax assessor and collector cut out part of their itinerary in the southern part of the county for the present, on account of the prevalence of smallpox in that section." If the tax assessor and the collector had been successfully vaccinated there would have been no danger for them to fear from smallpox even if they had come in contact with cases of the disease.

The FLORIDA HEALTH NOTES is sent regularly to the editor of the paper in which the above appeared; the tax collector in that county as well as the assessor also receive the publication. It may be they do not read it. If they had read several of the late issues they would have found some good sound advice on this point.

There is a certain magazine in this country whose name we would hesitate to mention in these columns, but it has such a unique ad that the desire to comment on that is irresistible. It says that "THIS IS THE ONLY PERIODICAL IN THIS COUNTRY THAT CONTAINS NO INFORMATION." Isn't that a unique confession when its long suit is fighting vaccination and vivisection?

### MALARIA OF BIRDS

We are not the only creatures that have malaria. Birds also suffer from malaria. Only they have a slightly different malaria "bug" from ours. Their "bug" wouldn't hurt us, and ours wouldn't hurt them. Why that is so no one can say, but it is so. It may be that the malaria bugs of birds would get chilled and die because we are so much colder than birds are—ten or twelve degrees Fahrenheit. And it may be, too, that our bugs would die of heat-stroke if introduced into birds.

Still another curious thing is that the malaria parasite, I mean ours, while he passes part of his existence at human temperature he passes another part at the temperature of the mosquito, which is only slightly higher than the surrounding air. And that varies a good deal. It may go as low as thirty or forty degrees in winter and as high or



higher than eighty or ninety degrees in summer. So he can stand a good deal of variation in temperature.

But then on the other hand it is one kind of bug that stands this great difference and another kind that doesn't. That is to say, it is one kind of bug while in the human being, and its offspring in the mosquito is another kind. That of itself is curious. That the parent bug should give rise to baby bugs so different from itself; and that these baby bugs should in turn give rise to kinds like their parents; and that the parent bugs should live in the mosquito and the baby bugs in the human being—all these are curious facts, but facts none the less.

And isn't it another curious fact that the bugs that live in the *anopheles*, and whose babies give us malaria, can not live in any other mosquito? And that the bugs that live in the *culex*, and whose babies give malaria to birds, can't live in other kinds of mosquitoes?

In London they have gone so far as to have an anti-vivisection hospital. Recently a child swallowed a piece of coal, got it lodged in the "voice-box" and was suffocating. In the emergency it was sent to the nearest hospital, which was the anti-vivisection. They refused to take it in because, they said, they had no bed for it. The coroner at the trial asked if they couldn't make shift for a baby nine months old? The reply was that, perhaps, if they had thought of it. But, at any rate, they turned it away and sent it to an infirmary, but it was in a dying condition when it got there. A hasty tracheotomy was performed, but it was too late. The jury while not convicting the anti-vivisection hospital, did add to their verdict this rider: "The jury does not appreciate the action of the anti-vivisection hospital authorities."

But what could the jury expect, any way?

"The *Pensacola Journal* is of the opinion that leprosy is not as bad as some people seem to think, and is inclined to encourage the establishment of a national 'leporian' in Florida, where the climatic conditions are said to be very beneficial in curing the dreaded disease. Y-e-s. And now we come to think of it, the government has a reservation near Pensacola which is about to be abandoned for military purposes. Why wouldn't this reservation make a good 'leporian?' The climate of Escambia county is excellent, with fine salt air to sniff."—*Palatka News*.

But seriously, many lepers, in spite of their loathsome malady, enjoy general good health. There are lepers that had they not been in a

leper hospital, would have hardly been suspected of having anything the matter with them. There are lepers that though they looked "far ben," as the Scotch would say, were still in fair health. One assured the writer that he had never felt better in his life—that he had not been sick a day in ten years, though his fingers had undergone ulcerative absorption until he had only stumps remaining, and his ears and nose badly deformed. They are a happy lot of people under fair conditions. They marry and are given in marriage and non-leprous children are frequently borne by leprous parents.

But a leper hospital is like a smallpox hospital—everybody wants it somewhere—nobody wants it near.

### HOG CHOLERA SERUM

In a press bulletin of the Florida agricultural experiment station, written by A. R. Spencer, on the subject of hog cholera, occurs the following passage:

Florida should have an appropriation from the legislature of not less than \$8,000, to furnish the necessary plant and equipment to supply the needed serum to the farmers of the State. Such a plant once established and well under way would be made nearly self-sustaining by charging those whom the vaccine is supplied with the cost of production, and no more.

This seems a very modest sum to ask for to bring about so great a benefit to, not only the hog raisers, but the whole State. Every hog raised is an addition to the wealth of the State. It adds something to the tax duplicate. When sold it adds that much to the wealth of our citizens; if the owner slaughters and eats it there is that much less sent out of the State to pay for pork. Almost, if not quite, every hog-raiser is a landowner. It is but a small sum to pay to enable him to protect his property.

We have not at hand the figures showing the annual loss to the raisers of swine from cholera, which is very heavy, we understand; in fact, enough so to be somewhat of a discouragement to the breeders. The State government has always shown a disposition to aid the farming element of our citizenship; we do not believe that the legislature will evince any backwardness to appropriate this small sum for so worthy an object.

It may need to be "shown." This is an easy task, for the national agricultural authorities have shown, by the most careful and conclusive experiments, the great value as a preventive of the serum that has been discovered. The fact of the value of the preventive as a certainty in its action has been abundantly proved, so much so that a number of State governments have already taken steps to do just what Florida is asked, by her agricultural experiment station, to do.

Two months hence the Florida legislature will be in session. The question of the need of such a State plant as is here proposed should be discussed with the legislators in the meantime and pledges secured, so that all the members may



be informed of the magnitude of the need before the subject is brought before them in the course of the proceedings.—*Editorial Times-Union, February 9, 1911.*

Quite true. Quite true. Smallpox is not the only disease preventable by vaccination. But what will the anti-vaccinationists say to see the procession walk off and leave them?

### ANNUAL SESSION, STATE BOARD OF HEALTH— ABSTRACT OF TRANSACTIONS

Pursuant to the requirements of the Statutes of Florida, the State Board of Health met in annual session at the executive offices of the Board, Jacksonville, Florida, on February 14 and 15, 1911. The following persons were present: Hon. E. M. Hendry, President; Dr. H. L. Simpson and Hon. John G. Christopher, members of the Board; Dr. Joseph Y. Porter, Secretary and State Health Officer, and Dr. Hiram Byrd, Assistant State Health Officer.

The minutes of the 1910 meetings of the Board were read and approved. The Annual Report of the State Health Officer for 1910 was read, accepted and ordered transmitted to the Governor of the State, and it was also ordered that the report be printed and distributed in the usual manner.

The letter of transmittal, from the President to the Governor, was read, and ordered submitted to the Governor with the Annual Report.

The rules and regulations of the State Board of Health were then discussed and a revision of the same made. The new rules were referred to the attorney of the Board for legal opinion.

The scales of salaries paid the attaches in the Division of Field Sanitation and in the Division of Bacteriological Laboratories were changed in several instances, proper increases being made where it was deemed justified.

### 1910 ANNUAL REPORT

The Twenty-second Annual Report (for the year 1910) of the State Board of Health of Florida, which was accepted by the Board in annual session on the 14th and 15th of February, 1911, is now in the hands of the printer and the work of printing the document is being rushed to completion. It is hoped that the Report will be mailed out during the latter part of the month of March.

### HOOKWORM DISEASE

Hookworm Disease, publication No. 79, of the State Board of Health, a pamphlet of 70 pages, has been received from the printer. It is desired that this pamphlet shall be placed in the hands of every

physician, health official and teacher in the State, as well as distributed to those private citizens by whom it can be used to advantage in furthering the campaign for the amelioration of this disease.

### TUBERCULOSIS NOTES

#### The Fight Against Consumption All Around the World

Associations for the prevention of tuberculosis have been formed in Cuba, Porto Rico and Trinidad. In Cuba there are over forty thousand deaths from tuberculosis every year, and the death rate from this disease is nearly three times as high as in the United States. In Porto Rico there are over six thousand deaths every year out of one million inhabitants. In Trinidad, the death rate from tuberculosis in Port-of-Spain, the only place where figures are available, was 4.75 per 1,000 in 1909, nearly three times the rate in New York City. Conditions in the other islands of the West Indies, where no active campaign against tuberculosis has been undertaken, are even worse. The chief reason for this high mortality is found in the unsanitary, dark, and poorly ventilated houses of the natives of the islands.

In Denmark, the campaign against tuberculosis has been carried on systematically since 1895. The reporting of living cases of tuberculosis in Denmark has been more successful than in almost any other country of the world. The death rate from pulmonary tuberculosis has fallen from 19.32 to 13.33 per 10,000 from 1895 to 1908. There is now one sanatorium for every 1,244 inhabitants and every tuberculosis patient is assured of treatment at a cost within reach of anyone. The State pays three-fourths of the expense of treatment and the patient or his community the remaining fourth.

The Italian government, on account of the number of tuberculosis cases among the Italian emigrants sent back from America, has appointed boards of examiners in the seaports, whose duty it is to report the arrival of tuberculous persons. These are then kept under observation in those places where they settle, to prevent further spread of the disease. The erection of new sanatoria and other tuberculosis institutions is being urged in Italy, and the number of beds for consumptives has been considerably increased in different places.

Consumptives in Syria are treated today much in the same way as the lepers have been for the last two thousand years. Tuberculosis is a comparatively recent disease among the Arabs and Syrians, but so rapidly has it spread that the natives are in great fear of it. Consequently when a member of a family is known to have the disease, he is frequently cast out and compelled to die of exposure and want. A small hospital for consumptives has been opened at Beyrout under the direction of Dr. Mary P. Eddy.

The Anti-Tuberculosis movement was started in Hungary in 1894, and in 1898 there were five institutions for the treatment of consumption. Today the

campaign is encouraged and financed by the government, and over two hundred different agencies are engaged in the fight. A permanent tuberculosis museum has been established at Budapest and a carefully conducted campaign of education is being carried on.

Japan is not lagging behind in the fight against tuberculosis. The Japan Health Association has over 200,000 local members and carries on a campaign of lectures in the cities and towns of the country. Tuberculosis is increasing in Japan, due chiefly, Prof. S. Kitasato of Tokyo says, to the rapid development of the factory system of industry, the introduction of modern methods and manners of civilization, and the increasing acuteness of the struggle for existence.

When the International Congress on Tuberculosis meets at Rome next September, representatives of over thirty National and provincial associations organized to fight tuberculosis will be present. Among the associations which will be represented are The United States, Canada, Cuba, Trinidad, England, Wales, Ireland, Norway, Sweden, Denmark, Russia, Germany, Belgium, Holland, France, Switzerland, Portugal, Italy, Greece, Bulgaria, Hungary, Austria, New Zealand, Japan, Cape Colony, Argentina, Brazil, Chile, Newfoundland, Roumania, Uruguay and Venezuela.

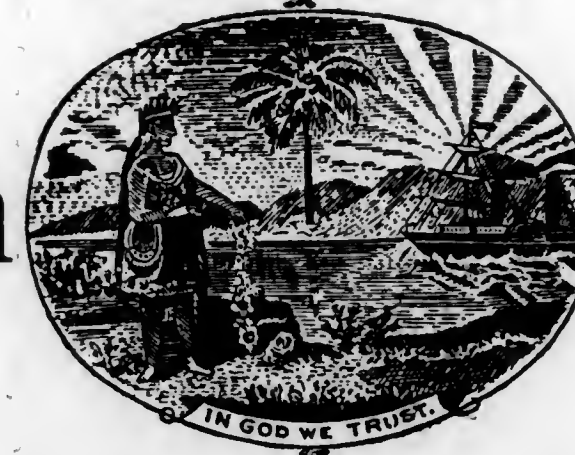
#### REPORTS FROM COUNTY AGENTS

The State Health Officer has received, and desires to express thanks for, annual reports regarding 1910 sanitary conditions in the State, from the following county agents of the State Board of Health:

Dr. J. Harrison Hodges, Gainesville, Alachua county; Dr. L. A. Peek, West Palm Beach, ex-agent for Brevard and St. Lucie counties; Dr. T. M. Edwards, Green Cove Springs, Clay county; Dr. R. L. Cline, Arcadia, DeSoto county; Dr. Warren E. Anderson, Pensacola, Escambia county; Dr. B. B. Blount, Carrabelle, Franklin county; Dr. G. W. Lamar, Quincy, Gadsden county; Dr. R. Dean Tompkins, Jasper, Hamilton county; Dr. W. H. Cox, Brooksville, Hernando county; Dr. Chas. Wm. Bartlett, Tampa, Hillsboro county; Dr. J. R. McEachern, Monticello, Jefferson county; Dr. W. D. Bush, Leesburg, Lake county; Dr. F. Clifton Moor, Tallahassee, Leon county; Dr. L. C. Ruter, Madison, Madison county; Dr. H. Baer, Braedtown, Manatee county; Dr. D. G. Humphrey, Fernandina, Nassau county; Dr. W. Kilmer, Orlando, Orange county; Dr. M. J. Hicks, Kissimmee, Osceola county; Dr. C. M. Merrill, West Palm Beach, Palm Beach county; Dr. W. E. Seay, Dade City, Pasco county; Dr. E. W. Warren, Palatka, Putnam county; Dr. H. Mason Smith, Milton, Santa Rosa county; Dr. W. C. White, Live Oak, Suwanee county; Dr. John MacDiarmid, DeLand, Volusia county; Dr. C. B. McKinnon, DeFuniak Springs, Walton county; Dr. F. C. Wilson, Chipley, Washington county.

These reports will be published in the Twenty-second (1910) Annual Report of the State Board of Health and will form a valuable index to health conditions as they existed in the several counties reporting during the year past.

# FLORIDA Health Notes



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Pensacola, City Hall.

Sent to any address in the State for the asking.

If you receive it without asking, it means that someone else has requested it for you.

When you change your address drop us a card.

When giving change of address, give both the old and the new.

Anything you want to know about the public health we will try to tell you.

Any information you want about communicable diseases of domestic animals we will help you to get.

Address communications to Jacksonville, Fla.

*Take up the White Man's burden—*

*The savage wars of peace—*

*Fill full the mouth of Famine*

*And bid the sickness cease;*

*And when your goal is nearest*

*The end for others sought,*

*Watch Sloth and heathen Folly*

*Bring all your hope to naught.*

—Rudyard Kipling.



### HYDROPHOBIA

Hydrophobia is still a public health factor in Florida and promises to be so for some years to come. The disease has become anchored in the State and drastic means for its eradication will not be tolerated by the public. The only way it can be eradicated is by systematically killing stray dogs and muzzling all others when not in confinement, and the public of Florida will not stand for measures of this heroic nature. The result is that hydrophobia will continue to harass the dogs and people of Florida. The only recourse is to make the best of the situation. This we are doing by—

Maintaining laboratories to make quick and positive diagnosis of rabies.

Giving the Pasteur treatment to those who are bitten by rabid animals.

Advising with city councils in communities where hydrophobia becomes prevalent, and instituting measures to check its spread.

At the laboratories, located at the three strategic points of the State—Jacksonville, Tampa and Pensacola—diagnoses can be made with dispatch. The difficulties experienced are:

1. The head is sometimes sent not packed in ice and reaches the laboratory in a state of putrefaction. It cannot be examined when in such condition.
2. The head is sometimes amputated prematurely, that is, as soon as the bite is inflicted. In such cases it is more difficult to make a diagnosis, and the laboratory, under such circumstances, is loath to make a negative diagnosis.
3. Sometimes the bite is inflicted and the animal allowed to escape, so that the head does not reach the laboratory at all.

In all these cases there is only one course to pursue, and that is to give the Pasteur treatment if the symptoms of the dog were at all suspicious and if the bite inflicted was sufficiently extensive and did not receive prompt cauterization.

The Board has often emphasized the course to pursue, but it seems to take the public a long time to "catch on," hence these misfits, many of which could be prevented.

The Board advises that in all cases where an animal inflicts a bite upon a human being, *not to kill the animal*, but to confine it for a period of five or six days and note symptoms, and if the dog is really sick, to keep him confined until he dies, and then pack the head and neck in ice and express it to the laboratory. If this course were pur-

sued it would save the administration of the Pasteur treatment in many cases.

The treatment is still administered by the family physician. It is prepared by the Dr. H. M. Alexander Co., of Marietta, Pa., and as soon as it is decided to administer it to a patient, the laboratory is wired and the treatment sent immediately to the family physician. The plan works very satisfactorily. It is not likely that this plan of administration will be improved upon for many years to come, if ever—*From Twenty-second (1910) Annual Report of the State Board of Health of Florida.*

### TYPHOID FEVER

#### Helps in the Management of Typhoid Fever, Recommended by the State Board of Health

Typhoid fever is due to a very small vegetable organism, the typhoid bacillus.

These little germs grow in the human body in countless millions, and as they die and disintegrate they set free a poison which causes the symptoms of typhoid fever.

The typhoid fever germs are thrown off from a typhoid patient in all the excretions, that is, the stools, urine, sputum, and perspiration. It frequently happens that patients excrete typhoid bacilli in the urine and stools for weeks or months after recovery. Hence all these excretions are to be regarded as highly infectious; that is, they are full of typhoid germs.

Good management of a typhoid fever case has for its object the prevention of these germs reaching other people and producing other cases of typhoid. To this end the excretions, that is the urine and stools, of typhoid patients should all be disinfected by the addition of ten per cent formalin equal in quantity to the amount of the material to be disinfected, and left to stand two hours before final disposition.

All carpets, rugs, etc., should early be removed from the sick-room.

Eating utensils used by the patient should be removed from the room after each meal, in a dishpan, and the pan immediately filled with *boiling* water and left to stand fifteen to twenty minutes before washing.

Soiled bed linen, nightgowns, etc., should be removed from the room in a large vessel, say a zinc pail or tub, and covered with *boiling* water. Better still set them on the stove and let them boil a while.

Only the person attending the patient should be in the sick-room.

The attendants should always wash the hands carefully after touching the patient or bedding, for the bedding, it must be remembered, is also infected.

Flies delight to visit the sick-room which is very annoying to the sick, and very dangerous to the well, for flies passing from the bed of the sick to the food of the well, contaminate the food and produce other cases of typhoid fever. If possible, the sick-room should be screened and all flies kept out.

After the case is terminated the room should be thoroughly cleaned.

### VACCINATION AGAINST TYPHOID FEVER

The only feature of typhoid fever development for the year of any note is embodied in the fact that some seventy-five persons in the State were vaccinated against the disease.

To understand the rationale of typhoid vaccination it is to be remembered that typhoid fever is due to a minute vegetable organism, the typhoid bacillus. This organism, after finding its way into the human being through food or drink, gets into the blood stream and multiplies in great numbers. While the germs are alive they do no harm, for they belong to the class of endotoxic organisms, that is to say, they do not throw off any toxin (poison) until after their death. But after the death of the germs they set free a toxin and it is this toxin that causes the rise of temperature and the general train of symptoms that we know as typhoid fever.

Therefore, when a patient has typhoid fever, he has myriads of these organisms in his body, living, multiplying and dying, and it is the dead ones that set free in the system the toxin that causes the symptoms. In other words, if the typhoid organisms could be thrown off as fast as they die, there would be no symptoms from the living germs.

Now, when a person has typhoid fever, he becomes immune against it, so that he does not have it again. Or at any rate very rarely does. And since it is the dead germs that have caused the fever, it is patent that it is the dead germs that have caused the immunity. Then to produce the immunity, it is only necessary to introduce a limited number of dead typhoid germs. And that is what vaccination against typhoid fever means. The germs of typhoid fever are grown in the laboratory. They are killed at a temperature of 53° maintained for one hour. Then a solution is made in which every cubic centimeter (quarter of a teaspoonful) contains one billion organisms. The first dose given is a

half cc., or five hundred million organisms. Ten days later a second dose of one cc., equal to one billion organisms, is given, and after a second ten days' interval a third injection equal to the second is given.

The symptoms in mild cases are soreness of the arm where the injection is made, a slight rise of temperature, perhaps, with a general feeling of indisposition lasting one or two days. In severe reactions these symptoms are more pronounced, and in some cases diarrhoea supervenes for one day. Not one of the seventy-five vaccinated suffered any special discomfort.

The protection afforded by the vaccination is best indicated by statistics from the English army, where about one-half of twelve thousand soldiers were vaccinated and the other half not.

During a period of two and one-half years the typhoid rate among the vaccinated was 3.8 per thousand, while among the unvaccinated it was 28.3.

The vaccine we used was furnished by courtesy of Surgeon-General Torney of the United States Army, and by Major Russell, Director of the Army Medical Laboratory.

Vaccination against typhoid fever now seems to be on a sound basis and will eventually become more and more used. It can be had now from commercial sources and any physician can administer it, so that all who want to be vaccinated against typhoid fever may do so. The protection that it offers lasts, it is believed, not less than six or seven years.—*From Twenty-second (1910) Annual Report of the State Board of Health of Florida.*

### INCIDENTS OF SMALLPOX CONTROL

In the absence of a law requiring vaccination, and having abandoned the old, inefficient, expensive method of guarding and quarantining smallpox, difficulty is experienced at times by the Assistant State Health Officers in preventing a spread of the disease among the anti-vaccinationists. Many reasons are given for this opposition. Some solemnly declare they prefer to have smallpox (and many of these have realized their preference), while occasionally one is found who "picks" a gun and dares any man to vaccinate him.

The experiences encountered in a town or county during the course of an epidemic of smallpox are often valuable lessons in dealing with citizens in other parts of the State.

Several months ago Dr. C. T. Young, Assistant State Health Officer, was busily engaged in caring for quite a large outbreak of the disease



in one of the centrally located counties, and as is always the procedure, was offering vaccination free of charge to those who would take advantage of this protection. Many of the intelligent citizens at once availed themselves of the privilege, but it is related by the doctor in his reports that among those who opposed the practice and refused to be vaccinated were a school teacher, a physician, and a county official, all of whom were afterward exposed to the disease and contracted serious cases. Among those opposing vaccination was a young man who made it his especial business to fill the town with the information that "as long as the balls in my pistol last and the blade of my knife holds, nobody will vaccinate me." Naturally, no one bothered him. He was allowed to blatantly pursue the course he had chosen. Ten days after his refusal to be vaccinated Dr. Young was called to the bedside of something that slightly resembled a man—a semi-confluent case of smallpox. It was practically an impossibility, so the doctor writes, to recognize the patient. Between the outbursts of pain and anguish, which were also punctuated by groans, he managed to say: "Doc, I wish that day when you wanted to vaccinate me you had taken a club, knocked my head off for being such a d— fool and had vaccinated me anyhow. Go in there and vaccinate those children and everybody else on this place. Keep 'em from having this thing if you can, for God's sake. I'm converted, but it's too late to save myself."

Some weeks before in handling another outbreak of smallpox in a community where several cases had occurred among the white citizens, an occurrence worth relating was provoked by an elderly lady. The old soul was a Christian Scientist. Each of the physicians of the town visited her and urged her to be vaccinated, but every one "fell down" in their efforts to persuade her. Dr. Young then had a session with her. She stated the case was "in the hands of the Lord." She was meekly told that the Lord only helped those who tried to help themselves and that physical inertia wasn't much indication of the power of the spirit. She then got out her Bible and read a few verses to the doctor and as he was leaving handed him some religious tracts to read. A young boy in the house, under this influence, refused also to be vaccinated. Several days afterward both developed smallpox.

And these incidents can be multiplied by scores. But the "antis" will not see nor hear even when proofs are furnished.

There is one time when everybody looks to his neighbor's welfare; that is to say, attend to his neighbor's business, and that is when his neighbor has smallpox.

## A BABY'S WORTH

(From Bulletin California State Board of Health.)

(The California State Board of Health has found that the cost of raising a babe from birth to its twentieth year is \$4,150.)

What is the worth of a baby's smile?

Give me the figures in money, man,

Name me its value in gold, the while

You snuggle the wee one, if you can.

Tell me the worth of the rosy kiss

As fresh and pure as the morning dew?

What is the price of a joy like this?

What is its moneyed worth to you?

What is the worth of the sweet embrace,

When wee arms cling in a glad caress,

And a velvet touch of a baby face

Against your own you can fondly press?

What is the price for the restless tongue

That chatters on in its baby glee?

And the little song at the even sung—

Who'll calculate what its worth may be?

What is the price of the eyes that shine

Their merriest glances into your own,

And the little fingers that oft entwine

About your neck as you sit alone?

Who'll name the cost of the little heart

Which beats the love it is giving there?

Who'll put a figure, in whole or part,

On a single curl of the golden hair?

What is the worth of the first step made,

As the baby feet leave the mother's side,

And bravely, joyfully, unafraid,

They toddle forth with no hand to guide?

How shall we reckon the cost in gold

Of the tears, the joys and the childish ills?

What is the value? And who has told

The price of the laughter which stirs and thrills?

What is the worth of a baby, pray?

Give us the figures in gold once more?

Name us the price you would gladly pay

For the lisp of a voice which has "gone before?"

What is the worth of the whispered prayer

You used to hear in the eventide?

What would you pay for a smile so fair

From the face of the babe which has lately died?

—E. A. Brininstool, in *Los Angeles Express*.

### HEALTH HINTS

If we procrastinate  
And fail to vaccinate  
The smallpox  
will  
get  
us  
sure!

Fly time is coming; get ready for it.

As a national industry, raising strong, healthy human beings should be as profitable as raising fine breeds of live stock.

The cow is the foster mother of millions of the human race.

The tuberculous cow must go.

It is a careless community that neglects the health problems of its educational system.

In the conservation of health an ounce of intelligence is worth a ton of ignorance.

"Where the sun does not go the doctor will" is an Italian proverb well worth remembering.

—*Bulletin Chicago Department of Health.*

### A PREDICTION

In July, 1907, which is now nearly four years ago, there was published in HEALTH NOTES a little squib, as follows:

"It is pleasing to report that the end of June finds us without a known case of smallpox. Gradually, but slowly, during the last few years, we have gained on that formidable disease. Gradually, but slowly, the population of the State is becoming more and more immune to smallpox—some through having the disease, and some through vaccination. But like the governors on a steam engine, the closer we get to the goal the more completely is the steam shut off. *So that when smallpox ceases to endanger our immediate safety, we relax our efforts and anon the population is its easy prey again.* Though the end be ever in sight, it is never attainable."

How completely that prediction is fulfilled, you should know. This morning a man 'phoned to report a case of smallpox twenty miles from Jacksonville. While he was yet talking over the 'phone—possibly five minutes—the following reports came in:

One case thirty miles out,

One case seventy-five miles out,

One case three hundred and sixty-five miles out.

These reports, remember, came in during one telephone conversation. Of course they are not pouring in that thick all day and every day, but quite thick enough to satisfy the prediction.

But it is not nice to say, "We told you so."

There are two towns in Florida, neighbors somewhat, and somewhat neighborly. One is a little larger than the other, but no more ambitious. They are ahead of many Florida towns in many respects, some of which are very important. For instance, they have solved their smallpox problems—at least for the present. During the next few months or years, smallpox will harass the people of Florida almost beyond endurance. But these two places will just smile. Schools will throw fits on account of a case of smallpox, but not at either of these places. Tourists will evade places on account of smallpox, evade others to come to these places. Their population has been vaccinated. But how it came about is another story. It took forty or fifty cases of smallpox to bring it to pass at one of them. The other brought it to pass without it. There is the difference.

Which town would you prefer to live in? Which of these two do you think is the more progressive?

### SCARLET FEVER

#### Helps in the Management of Scarlet Fever, Recommended by the State Board of Health

Unless means are taken to combat scarlet fever when it appears in a community, it may spread rapidly and do incalculable damage in a short time. The measures taken to check the disease are troublesome, but they are trifling compared to the danger to the community, and will save much greater trouble and suffering, without great expense.

A few general principles apply to communicable diseases which, unrestrained, tend to become epidemic in character.

First. Cases should be isolated, not partially but completely, from well members of the family, and in order to do this effectively, a room for the treatment of the case or cases should be selected in the dwelling or home, well ventilated, and as far removed from the other occupants as is possible. To avoid a great deal of trouble after the termination of the case, and to lessen the danger of retained infection, the room



should be as scantily furnished as will be conducive to comfort and hygienic care of the patient. Carpets, rugs, curtains, and superfluous articles of furniture should be removed, the floors, ceilings, and window-casings wiped off to remove dirt and dust, and ample receptacles provided for disinfecting solutions, before the sick one is moved in.

Second. Only those who intend to nurse the sick and remain with the case should be allowed in the sick-room. On no condition should the nurse be permitted to have communication with the well members of the family or with the outside public without completely changing outer garments and disinfecting face, hands, hair, and beard. As this process is a troublesome thing to do several times a day, it is the better plan for nurses in contagious diseases to keep themselves isolated with their patients.

Third. During the progress of contagious sickness, articles used in the sick-room should be disinfected before leaving the apartment. Tumblers, mugs, dishes, knives, and forks, after being used by the sick should be dipped in a disinfecting solution or immersed in actually boiling water for fifteen minutes, and body linen, bedclothes, towels, handkerchiefs, and, in fact, every textile article used in or about a sick-room or person, should be immersed for several hours in a strong germicidal solution before being removed from the room to be laundered. The excreta of the sick—stools, urine, and discharges of every kind—should always be disinfected before being taken in covered vessels from the sick-room. In some diseases, such as diphtheria and scarlet fever, where there is apt to be much mucous and membranous discharge from the mouth and nostrils, the use of paper napkins is preferable, for these can be burned in a fireplace or stove in the room. This is also a good method of disposal of such soiled textile articles as have no particular value.

Fourth. On the termination of a case of contagious sickness, by complete recovery of the patient or by death, the apartment should be disinfected before being again used. Mattresses, pillows, and such bed-room furnishings that can not be boiled should be burned after removal from the room and when possible this removal should be in covered boxes or vessels with impervious coverings.

No one should then enter the sick-room until it has been fumigated by some person designated for that purpose. After the room has been fumigated, it should be sunned and aired for several days. It should finally be carefully scrubbed with soap and water, and its woodwork should be well washed. Articles of no value which remained in the sick-room during the patient's illness should be burned. Fumigation

is never perfectly satisfactory. Everything possible should be boiled or burned.

The foregoing are some of the precepts which should be followed when dealing with any of the infectious and contagious diseases, and are equally applicable to cases of diphtheria, scarlet fever, measles, and smallpox.

Scarlet fever—scarlatina—as you doubtless know, is a highly contagious malady, which may be contracted at any age by those not protected by a previous attack, but is principally a disease of the developing period of life—youth—from infancy to twenty or thirty years. It is a disease, even when skillfully treated, which often leaves in its trail impairment of hearing, diminished eyesight, chronic sore throat, or kidney affection. Therefore, no one, especially a child, should be exposed under the fallacious idea, which is criminal, that children should have this disease before advancing to manhood or womanhood.

Anyone who would intentionally or needlessly expose another to the poison of scarlet fever, or any of the more highly contagious epidemic diseases, should be prosecuted by the law.

When scarlet fever is reported or suspected in a community, every sore throat accompanied by fever, and subsequently a rash, should be looked upon with uneasiness, and should be isolated from the well until the judgment of a physician is invoked.

Moderately severe cases generally present premonitory symptoms of sore throat, high fever—from 103 to 105° F.—from twenty-four to thirty-six hours, and perhaps three days, when a bright red rash appears all over the body, accompanied with itching. The tongue has red papillæ (which are plainly seen), with red tip, and which gives it the appearance of a strawberry. A strawberry tongue, therefore, with the other symptoms mentioned, and with albuminous urine, is strongly indicative of scarlet fever. From ten days to two weeks, sometimes longer or shorter, according to individual cases, the rash fades and disappears, when the desquamation period begins. This is an effort of nature to cast off the dead epidermis—scarf skin—of the body. Scarlet fever is a necrobiotic disease, destructive to tissues principally glandular. It is at this stage of sickness that ear trouble is manifested, eyesight impaired, or kidneys become acutely inflamed. And it is also at this stage that the contagious principle is most acute and readily communicable.

No adult or child sick from scarlet fever should be given liberty or allowed communication with the public generally, until the des-



quamation period is entirely and completely finished. Parents in their impatience and haste to be relieved from restrictive regulations, too often declare their child or children well who have lately been sick from scarlet fever, before they *are well*, and before this "scarf skin" shedding period is through with. Thus, in a few days or weeks, other cases are reported in the same neighborhood among children who have been visiting, or playing elsewhere, with the scarlet fever convalescents.

In addition to insisting upon and maintaining a proper isolation of the sick with their nurses, if the municipal or town authorities will require imperatively that a scarlet fever case shall not be released from restrictive regulations until the "shedding" stage is completely over, and will then see that the room, rooms, or entire premises, if deemed advisable, shall be *perfectly* disinfected, there should be no difficulty in preventing scarlet fever from spreading beyond the initial cases.

### QUARANTINING SMALLPOX

The opposition of several States of the Union to quarantining smallpox, and the fact that several of the States have abandoned such procedure, leads *The Medical Officer* of London to commend the abolishment of quarantine to some of the British health authorities.

### SMALLPOX---QUARANTINE---PESTHOUSES

In many localities there is a strong tendency to evade diagnosis. This tendency on the part of both physicians and laity is due, mostly, to a fixed traditional belief that smallpox must of necessity be a very severe disease. Also, even when admitted to be smallpox, if the cases are of extremely mild type public opinion does not feel the necessity for rigid quarantine and so cases are not reported and the existence of the disease ignored until it spreads throughout an entire community.

The Board feels that in this question the attitude of the general public is in a rough degree practical and approaching the attitude of best medical opinion, although not in accord with the present laws. In other words, this Board is still of the opinion that the Minnesota and Montana method of dealing with smallpox is wise, viz., *to put the burden of protection upon the individual and not upon the public*, by removing strict quarantine and in its stead placarding premises and warning all exposed persons to get vaccinated. However, our neighboring commonwealth, British Columbia, still holds rigidly to the old view of strict quarantine, and our commercial relations with British

Columbia are so great that we cannot change our present regulations without her consent.

*It is the firm conviction of the executive officers of this Board that no money spent for public health work is so nearly wasted as that expended for pesthouses, special guards, special fees, etc., for smallpox. If all this antiquated machinery could be done away with and the money used, for instance, in better isolation of typhoid fever or whooping cough, it would be much more judiciously expended.—(From the Eighth Biennial Report of the State Board of Health of Washington, 1909-1910, page 27; Dr. Elmer E. Heg, Secretary.)*

The italicizing of this last paragraph is done by the NOTES, for it aptly expresses the opinions of the executive officers of the State Board of Health of Florida.

### HEALING BY PRAYER

The subject of healing by prayer came up at the recent convention of the Protestant Episcopal Church of America. The commercial successes of Christian Science and, in a lesser degree, of the Emmanuel movement and other mental healing cults has led to an urgent demand on the part of some of the clerical members that the church should resume what one of the speakers described as "one of its most precious jewels," viz.: "the gift of the healing of the sick."

It is impossible to recognize in this assumption of a "gift" of healing inherent in the church, a very pregnant danger. Without any desire to enter the arena of theological controversy, we feel constrained to point out that, even on purely theological grounds, the injunction to "heal the sick" as a part of the official duties of the church was linked with the power to do other things that man in general admits his inability to do. "They shall take up serpents; and if they drink any deadly thing it shall not hurt them; they shall lay hands on the sick and they shall recover" (St. Mark xvi, 18). It is necessary, therefore, before the ritual exercise of such a "gift" of healing the sick be allowed to encroach on the means thereto bestowed by scientific knowledge on all modern nations, that those who claim it as a mere matter of authority should at least substantiate their claims under the terms of their own charter. *Fiat experimentum in corpore villi*. Before essaying the exercise upon others of the powers claimed by the substitution of the "gift" for the healing measures most approved at the present day—measures which civilized governments deem so important that practically all license the practitioner only after due ex-



amination and proof of capability—the would-be ecclesiastical healer should first be called on to demonstrate in his own person the possession of the “gift” by handling a rattlesnake and drinking a draught of prussic acid. Survival after these tests, clearly justified by the commission on which his claim to the “gift” of healing is based, would undoubtedly convince even the most skeptical that so far as the particular candidate was concerned he undoubtedly held a key to some, at least, of Hamlet’s “more things in heaven and earth \* \* \* than are dreamt of in our philosophy,” and would concede to him a claim to inhabit a plane above the ordinary and therefore to be exempt from the restraints placed by law upon ordinary mortals.—*American Medicine*.

### A PHASE OF RAILWAY SANITATION

The railroad dissemination of infectious material must receive a great deal more attention than it has, or our sanitarians and sanitary experts will be open to very severe criticism for neglecting such an active factor in the spread of disease. For many years physicians from time to time have called attention to the fact that the methods employed by the railroads in disposing of train sewage are contrary to every principle of sanitation—or decency. One has only to pause and consider the careless way the most dangerous material in the world is deposited along our railroad tracks to pollute our water-courses, or on drying to contaminate our atmosphere, to become thoroughly indignant that the railroads, great and powerful as they are, should be thus allowed to outrage every sense of right and cleanliness. Every one knows how substantially travel by railroad has grown within the past decade. The increased facilities and comforts have not only led healthy people to travel much more extensively, but have also made it possible for the sick and unwell to take long journeys. Consequently there is a large number of sick people constantly using the railroads and the present lack of provision for caring for the discharges of either the healthy or unhealthy means that an enormous amount of contaminating material is spread far and wide. It is indeed a serious problem, and the elaborate measures that are being enforced everywhere to prevent stream pollution, to maintain our thoroughfares as cleanly as possible and to dispose of sewage in ways that rob it of all danger, make it imperative that steps no less stringent should be promptly taken to stop the railroads from jeopardizing the health of communities in the manner we have described.

As a significant sign of the times, only recently an edict of the New York State Board of Health went forth that all closets on railroad trains should be locked while passing through the district of the Croton water shed. The wisdom of this is beyond all controversy, but since the dangers that made such precautions necessary or desirable in this one instance are constantly present, precautions no less effective are necessary and desirable all the time.

Certainly the question must come up for settlement in the very near future, and if the railroads will not voluntarily place themselves in harmony with right and propriety by suitable caring for train sewage instead of spreading it to the winds and adding so materially to every community’s burden of disease, they should be forced to do their duty by law. Certainly the problem of rates is not important, for while this, it is true, touches the pocketbook, that of sewage disposal touches the health and everything pertaining to it. What a reflection it is finally on the morals of our railroad officials that they are willing to go on allowing their trains to scatter filth and disease broadcast when every instinct of decency cries out in protest. The real wonder is that the people who have recognized the relation of the railroads to some of our worst outbreaks of typhoid fever have been willing that an intolerable condition should continue so long.—*American Medicine*.

### A MUSEUM OF SAFETY AND SANITATION

The proposed museum of safety and sanitation should be established in every city at once, for the people must be informed that the present wholesale destruction of usefulness, or of life itself, is in fact mostly preventable. It is a matter for State regulation, as the individual man seems to glory in taking risks. Miners, for instance, can not be trusted with the keys to their own safety lamps. Railroaders assume risks in spite of rules, though it is often charged that they are expected to do so, as the rules are to protect the company against damage suits. No matter how risky a job may be, an advertisement will bring abundant applicants. Similarly the most deplorable faults of sanitation are endured when they could easily be cured. Nevertheless, when the people learn that it is society’s duty to protect them from harm, they will demand compensation if injured by preventable disease. The time is not so far off when it will be possible to collect damages for, say, typhoid fever. It will then be cheaper to prevent, and the museum of sanitation will bring on this preventive era much sooner. Old-age pensions are now accepted as a permanent public policy abroad



and we might as well prepare ourselves for the time when invalids of all kinds are pensioned—indeed, they now need help far more than most old people who have been able to save up for the rainy days. Let us have the museum of sanitation at once to show how we can and must prevent illness and death. People must be saved in spite of their ignorance, and only those permitted to die who through sheer foolishness invite disease, like the anti-vaccinationists.—*American Medicine*.

### LOOSE AGAIN

Because a woman, crazy about cats, subsidized a lawyer and a press-agent for an indefinite length of time, the State of New York must face every year some bill aimed at scientific research. There are various organizations of this type, varying in the amount of absurdity and of harm. The Society for the Prevention of Cruelty to Animals has possibly put an end to its usefulness by swinging over to the anti-experiment camp. The act which has been introduced this year shows that the American societies, defeated again and again, have taken a lesson from England and are now asking for investigation instead of restriction. Pasteur and Koch could not have done their work as the British law stands today. Of course, investigation is a plausible term. As a matter of fact, what the opponents of scientific progress object to is experiments which are fully set forth in scientific publications. Investigation would be a mere form of sentimental agitation. The scientists make no concealment of what they are doing. On the contrary, they gave it all the publicity they can obtain. We can hardly believe that the present is a favorable moment for these dangerous sentimentalists to succeed. The death-rate from meningitis only two or three years ago was from seventy to eighty per cent. Now the rate, counting all cases, is twenty-five per cent., and in the cases where the serum is given early it runs as low as six to eight per cent. Among those cases which were called cured before the serum was discovered were the long-drawn-out and most painful ones which left imbecility or some frightful deformity. These cases now have absolutely disappeared. As this triumph over one of the most terrible and agonizing diseases, from which the principal sufferers are children, is so fresh in the mind of the public, it hardly seems possible that a backward step should be taken. Dr. Flexner and the Rockefeller Institute, in conquering meningitis, used twenty-five monkeys and about two hundred guinea-pigs and rabbits.

There is one dreadful and destructive disease which men hesitate to name. It struck down not only the guilty, but millions of innocent women and millions of innocent children. That disease has within a few months been mastered by a drug, the most perfect drug antidote in the world. The cost of conquering this disease was a few rabbits and a few mice.

Dr. Carrel, only a short time ago, perfected the delicate operation of transfusion of blood, which is now saving many lives. The cost here was a few kittens; the societies would much rather have had the kittens put into a bag and thrown into the river.

Infantile paralysis filled this country with terror a few months ago. The experiments which have taken place since then mean that this disease will be handled much better next summer, and there is every promise that before long

it will be exterminated. Doubtless in the process a few animals will meet their death in the service of science, instead of in the ordinary form. There are a number of mice now suffering from cancer in order that one of the most deadly and most painful of diseases may be conquered. The Society for the Prevention of Cruelty to Animals ought to bend all of its energies to stopping the men of science from making any use of these mice. If they do not successfully interfere, it is likely that cancer may be conquered as thoroughly as diphtheria, which has been reduced from one of the most destructive scourges of children to a point where, if the antitoxin is taken in the first twenty-four hours, the death-rate is only about one and a half per cent.

A fight is going on against the gipsy moth, the hookworm, and other well-meaning inhabitants of the globe. We suggest that bills be introduced by humanitarians into all the Legislatures to protect these guiltless creatures. Rats are unpopular just now because of the fact that they carry the bubonic plague and other diseases. There ought to be organized at once a society for the protection of rodents.

The more reasonably these bills may be made to sound, the more chance there is that they may accomplish some unspeakably fatal blow against the human race. There are laws now in plenty forbidding cruelty. The great institutions which are specially aimed at by the cranks, like the Rockefeller Institute, are in the hands of men who are spending their lives in the cause of solid and real kindness. Shall we take away from splendidly equipped experts of devoted character the right to judge what experiments are necessary, and put the question into the hands of some fool committee made up of persons in whom hysterical excitement takes the place of knowledge?—*Collier's Weekly*, March 4, 1911.

### EXAMINATION FOR EMBALMER'S LICENSE

The spring examination for embalmer's license will be conducted at the office of the State Board of Health, Dyal-Upchurch Building, on Saturday, May 13, 1911, at 10 o'clock a. m.

The State Board of Health believes that bodies which are to be transported from point to point in this State or from this State to other States should be embalmed in a proper manner and only by those who have shown they are qualified for this work. The examination is therefore conducted along practical lines. All applicants are required to present evidence to the Board of Examiners of having had two years' apprenticeship under a licensed embalmer or in an embalming establishment operating under a license of this or another State, before being allowed to take the examination. The examination question will give the applicant an opportunity to present his knowledge of the general anatomy of the human body and the natural processes by which dissolution of organic matter is brought about, the methods of controlling these processes, as well as his ability to demonstrate a knowledge of practical embalming. The examination is rigid and



only those making creditable percentages (of 75% or over) will be granted license.

The Board of Embalmers' Examiners is composed of the State Health Officer, the senior Bacteriologist of the State Board of Health, and the Assistant State Health Officer detailed for duty at the Executive Office.

## THE PHARMACY LAWS OF FLORIDA

TAMPA, FLA., February 23, 1911.

*Editor Florida Health Notes, Jacksonville, Fla.*

DEAR SIR: I ask that, for the benefit of the public health and for the information of the retail druggists of Florida, you will give space in your valuable paper to the following synopsis of our Pharmacy Laws and the duties and objects of our Board of Pharmacy:

The Florida Pharmacy Law was enacted in 1888 as a result of the activity of several of our prominent retail druggists. The law has been on the statute book since its passage. It has been amended and modified from time to time.

It has been said that a good law without execution is like an unperformed promise. The Florida law was never quite a dead letter, for the rank and file of pharmacists, wherever found, are law-abiding citizens and comply with the legal regulations affecting them. The observation of the Florida law was, until recently, largely a matter of volition. Practically all of the competent pharmacists registered, while many of the incompetent went on in the even tenor of their way as if no law existed. The expense of maintaining the executive machinery was borne by those who heeded the provision of the law, but was not sufficient to provide funds for the full enforcement of the law and protect the public from incompetent persons posing as pharmacists.

Conditions continued as have been outlined until June 20, 1909, when important amendments were introduced by the Joint Legislative Committee of the Board of Pharmacy and the State Pharmaceutical Association and, being adopted by the legislature of that year, became effective. The bill was passed practically as presented and thus represents the judgment and wishes of the organized pharmacists of the State of Florida. On June 1st of each year the certificates of registration expire and a fee of one dollar is charged for renewal. This section is not peculiar to the Florida law, but is common to practically all of the State pharmacy laws. The money thus raised creates a fund to be used in meeting the expense of enforcing the law. It enables the board to take the initiative in prosecutions and to retain special counsel in court cases. It is the provision the lack of which weakened the old law and rendered impotent all of the amendments since 1886.

Although the new law went into effect in June, 1909, it was not until the past few months that the board has been in a position to push the enforcement of the act. It required a year to organize plans and map out the work. Furthermore, the board has given every one ample time to comply with the law. The

members of the board being practical retail pharmacists, they understand fully the trials and tribulations of the calling and sympathize with all who desire to live up to the law. The secretary of the board has issued circulars, made use of the good offices of the jobbers and used the columns of the pharmaceutical press to acquaint those who retail or compound medicines in Florida with the provisions of the pharmacy law of the State. In fact, the board has done all that could be expected and much more than the law or custom requires, in order to give publicity to the law and explain the duty of those whom it affects.

The Board now has a card index record of the law-abiding dealers in medicines in Florida and has recently set about the work of locating the ones who, through ignorance, neglect, or in a wilful manner, are violating the pharmacy law. The entire State will be systematically and carefully canvassed and the facts obtained recorded for use in prosecutions. It is surprising how many seem to think that laws, like New Year's resolutions, are made to be broken. They forget, that "all beings have their laws, the material world has its laws, superior intelligences have their laws, the beasts have their laws and man has his laws." One tricky proprietor showed the inspector his internal revenue tax stamp as a retail tobacco dealer as evidence that he was registered as a pharmacist. Another said he would register when he "got good and ready." A third one declared he would fight the law. Perhaps he never heard the advice of La Bruyere, who said: "Avoid law-suits beyond all things; they influence your conscience, impair your health and dissipate your property." One pharmacist said that he must make a living and no law could prevent him from doing so. Another party declared he would take down the sign and no longer call the place a "drug store," so it would not come under the law. Perhaps the most fortunate unregistered dealer is the one who was "too busy to answer questions." We surmise that he will have time to respond to court summons.

The canvass being made by the Board is causing some of the violators of the law to think in a serious manner. Those who have diplomas or certificates from other State boards or have had four years' experience in a drug-store and can pass a preliminary examination are applying for temporary certificates, which are good until the next meeting of the Board and for which a fee of \$2.50 is charged. Some are looking for a "pull with the Board of Pharmacy." The average person who runs a drug-store contrary to law seems to think the jobbers, manufacturers and cigar men with whom he does business should find a way of protecting him from the law. He expects the pharmaceutical journals to which he subscribes to furnish formulas for a serum of immunity which will render him proof against prosecutions.

Some of the pharmacists in Florida, and especially those in the drug business, who are not registered, may feel that the Board is unnecessarily active in carrying out the provisions of the law. It is but natural that after living under an inoperative pharmacy law for a quarter of a century, the new order of affairs should by contrast attract much attention and develop some criticism. We can say to all who feel inclined to criticize that they should be thankful that the law is being administered with so much consideration. In some States the Board of Pharmacy is a political machine, pure and simple. Florida pharmacists have in the past escaped the disagreeable consequences of too much politics and too little pharmacy in board matters, and it is to be hoped that such will

continue for many years to come. I have all along urged pharmacists to become active in politics, but all pharmacists should discourage politicians in pharmacy.

We should all bear in mind that our laws are primarily for the protection of the public, drugs, poisons and physicians' prescriptions must be dispensed only by competent, careful druggists, who have proven themselves such by coming before the State Board of Pharmacy and passing a satisfactory examination.

It is the duty of the Board of Pharmacy to see that the laws are observed and it is our aim to elevate the practice of pharmacy to a higher plane. Our law needs further improvement and several important amendments have been drawn up. In this we ask the co-operation of all good citizens and pharmacists in our fair State.

E. BERGER,

*President Florida State Board of Pharmacy.*

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*The insect we now call the "house-fly" should in the future be termed the "typhoid-fly," in order to call direct attention to the danger of allowing it to continue to breed unchecked.—L. O. Howard.*



## THE CAMPAIGN AGAINST THE TYPHOID FLY

The investigation conducted by Drs. Reed, Vaughn and Shakespeare during the Spanish-American War of 1898, and their subsequent publicity directed the attention of health organizations, the medical profession, and the general citizenship toward the house-fly as a disseminator of disease, especially of typhoid fever. The sanitarians of the United States took hold of the situation and kept constantly before the public the danger of allowing the fly to come in contact with foodstuffs; stating through the newspapers, bulletins and circular letters its habits and the methods by which it was a carrier of disease.

When the *FLORIDA HEALTH NOTES*, after several years dozing, was revived in July, 1906, in its first issue the fly was dealt with, and an effort has since been made to continually keep this subject in the minds of the readers of the *NOTES*.

In 1908 it was realized that in order to reach a large number of the citizens in an educational campaign against the fly, greater success would be assured by means of a poster picturing the evolution of the fly and stating the danger to be apprehended, with methods of preventing fly-breeding. In August of that year the poster "From Flies and Filth to Food and Fever" was designed by the State Board of Health and very soon thereafter was distributed throughout the State. The poster was received very kindly by the public, and also attracted attention throughout the United States; many State and city boards of health and health organizations (as well as disinfectant manufacturers and wire-screen concerns) reproducing it either wholly or in part for their local use.

The poster has been printed in colors and on cardboard and cloth. It was also translated into the Spanish language and an edition in Spanish distributed among the Latin citizenship in Key West and Tampa. The first Spanish edition was published in May, 1909, and distributed to the "readers" in the cigar factories of the State, as well as other literature relating to tuberculosis and public health questions. The poster has been reprinted many times for this office and requests have continued to be received for copies since it was first distributed.

Dr. L. O. Howard, Entomologist of the United States Department of Agriculture, has been especially active in a study of the fly, and his statement, "The insect we now call the 'house-fly' should in the future be termed the 'typhoid-fly,' in order to call direct attention to the danger of allowing it to continue to breed unchecked" (which we use for

our monthly quotation), has resulted in the adoption of this name for the fly in almost all parts of the United States.

In March, 1910, the American Civic Association included in its work a campaign against the typhoid-fly and appointed a Fly-fighting Committee, of which Mr. Edward Hatch, Jr., of New York, was made chairman. The committee has been active in this work, furnishing the press with "fly" stories, arranging for motion-picture reels, and distributing most effective circulars and bulletins throughout the United States. The Civic Association, through the chairman of the Fly-fighting Committee, is now offering prizes to school children for essays on the typhoid-fly. Several cities are taking up this feature of the work. The City Health Officer of Jacksonville conducted such a contest in the schools of the city last fall and most excellent little treatises on the subject were furnished by a number of the school children.

The *Chicago Daily Tribune* deserves special mention for its co-operation in this campaign, one of the cartoons from that paper being reproduced in this issue of the *NOTES*.

Among the more interesting features of the campaign is the use of the motion-picture film showing "The Fly Pest" and "The Acrobatic Fly." The State Board of Health of Florida purchased one of the films in April, 1910, and since that time it has been used to good advantage in motion-picture theatres in many of the cities of the State.

The result of all this work has been to arouse public sentiment as to the necessity for exercising precautions to prevent not only fly-breeding but the dissemination of disease by this pest. The necessity for regulation led the State Board of Health, in the fall of 1910, to adopt somewhat stringent rules to govern the maintenance of livery-stables (where 95 per cent of the flies are hatched), and to require that dining-rooms of hotels, restaurants and boarding-houses should be screened. While it is known of course that the public as a whole has not as yet realized the danger of the fly and therefore has not hastened to comply with the regulations and advice of the State Board of Health, yet it is found that in all parts of the State the advice is being heeded, and, as noted in these columns some months ago, it is especially gratifying to find that this advice is being followed in many instances by our colored citizens.

The lecture system of the Board has grown from year to year, and it has been the rule of the Assistant State Health Officers in their work to place special emphasis upon the dangers of the typhoid-fly. Occasionally, where formal lectures are arranged for, stereopticon pictures are used to illustrate the subject.



That "season" of the year which brings with it the greatest number of mosquitoes and flies, and therefore malarial and typhoid fevers, is now at hand; and it leads the NOTES to believe that it is desirable to impress upon the citizenship of Florida the necessity of precautions to be exercised in preventing the breeding and biting of these insects and the prevention of the diseases they transmit.

**DON'T FAIL TO JOIN THE "INDEPENDENT ORDER OF FLY SWATTERS."**



—McCutcheon, in *Chicago Daily Tribune*, March 15, 1911.

## THE TYPHOID-FLY

Flies are disease carriers  
Live and breed in all kinds of filth  
Infect food and drink by germ-laden feet  
Each female fly can lay 150 eggs  
Should be kept out of dwellings.

Flies breed in horse manure, cow dung, decaying vegetables, garbage of all descriptions, dead animals and human excrement.

Flies are Nature's scavengers, it is true, filling the same function as some bacteria do, but become an intolerable nuisance and DANGER when entering human dwellings and contaminating foods.

The presence of flies is a direct evidence of careless housekeeping and of the existence of filth in some form about the premises.

Remember that when and where *absolute* cleanliness prevails there will be no flies.

Look daily after the garbage cans. See that they are carefully sprinkled with lime or kerosene oil and effectively covered.

Do the same thing to manure heaps, and remove all manure from stables every three or four days, and when removed, cover with lime and sand.

Look carefully after the cuspidors. They require constant attention. This is particularly true in hotels, boarding-houses, railroad stations, and in fact, wherever people congregate in large numbers.

Flies are fond of hovering around cuspidors and feasting on tuberculosis sputum. The specks of flies contain live tubercle bacilli after they have eaten tuberculous sputum, showing that the bacilli will pass through the digestive tract of the fly in an active infective state.

Flies carry on their mouths (probosces) and on their legs putrefying and disease germs, on which they have recently fed, and then crawl over food, infecting it, unless shut out by screens.

Keep flies from the SICK, especially those ill with communicable diseases. If the room is not screened the patient should be treated under a net, both for safety to others as well as for individual comfort.

SCREEN ALL FOOD. Apply this rule, not only to food prepared at home, but to foodstuffs offered for sale, and especially fruits, salads and all other foods which do not require to be cooked. For—



*Flies crawl over fruit when exposed for sale, unguarded by screens, and people generally do not wash fruit before eating it. This is a fruitful source of human infection, particularly if a case of typhoid fever nearby is being carelessly handled.*

Don't forget that flies will carry the bacilli of typhoid fever from the stools of the patient (if left exposed and not disinfected), if given an opportunity, to the food in the kitchen and dining-room. This is no conjecture, for it was proved during the Spanish-American War.

The great secret of how to get rid of flies is CLEANLINESS, and by screening all openings at the home, especially the kitchen and dining-room.

The following parody on a familiar poem is printed on cards and circulated in the New York public schools:

Mary had a little cold  
That started in her head,  
And everywhere that Mary went  
That cold was sure to spread.

It followed her to school one day  
(There wasn't any rule);  
It made the children cough and sneeze  
To have that cold in school.

The teacher tried to drive it out;  
She tried hard, but—kerchoo!—  
It didn't do a bit of good,  
For teacher caught it, too.

"We have found," says Dr. Allen, who composed the parody, "that a single jingle like this will become much more firmly impressed on the childish mind than would any collection of health commandments and texts, printed on cards and distributed. The latter form of literature would not be comprehended by many of the duller pupils, while the others would not see in it the significance a grown person would.

"The parody, on the other hand, first amuses the child and in that way rivets his attention on the words. By constant repetition the lesson for which the rhyme was intended is at last borne home to him in a manner he will never forget."

Writing on colds, Dr. A. P. Reed says that it is understood their immediate cause is an infection from impure air, dust, etc. The doctor adds that, owing to their contagious character, colds generally go from one to another of the same family or association, as in schools, stores, offices and wherever people are massed, this massing of people being always a menace requiring extra care to avoid deleterious results. Whenever a city neglects to sprinkle its streets it has been noticed that nasal and throat irritations, leading up to catarrh, acute and chronic, are much more prevalent.—*Bulletin, Chicago Department of Health, April 8.*

### A DIVISION OF SANITARY ENGINEERING

The State Board of Health is constantly receiving requests from the citizens and the smaller communities of Florida for expert advice in regard to the construction of plants for the sanitary disposal of sewage and domestic wastes and the installation of public water-supply systems. While these requests have been given the best attention possible by the State Health Officer and his assistants, yet the Board has often realized that a necessity exists for an expert to be on the ground and give advice that might relate to each individual instance. The question therefore presented itself to the Board, as it has in previous years, when in annual session February 15th, whether or not the Health Department of the State should have as a feature of its work a Division of Sanitary Engineering, not only to give more and better attention to these matters, but to furnish preliminary engineering instruction and information. The Board being impressed with the necessity for such a supervision, instructed the State Health Officer to have drafted a bill to be placed before the legislature, which, if adopted, would provide for such a division. The proposed bill is published in this issue of the NOTES, a copy of it having already been furnished at the convening of the Legislature, to the President of the Senate and the Speaker of the House. It has been introduced in each branch of the Legislature and referred to the Committees on Public Health. Copies of the bill were also furnished to many of the newspapers throughout the State and published by them, in order that the citizens of the State might be fully acquainted with the action of the Board. The proposed bill is as follows:



## A BILL

To be Entitled An Act to Authorize the State Board of Health of Florida to Employ a Sanitary Engineer Whenever the Said Board May Consider the Necessities of Sanitation in and About the State May so Require and to Further Provide for His Compensation.

*Be it enacted by the Legislature of the State of Florida:*

SECTION 1. That the State Board of Health of Florida be and is hereby authorized to employ or engage the services of a Sanitary Engineer, whose expert knowledge in the subject shall be determined by the State Health Officer, whenever in the opinion of the State Health Officer the necessities of sanitation in and about the State may require an expert opinion and decision in regard to the construction of sewers, drainage of a sanitary character, the disposal of sewerage and domestic wastes, or the institution of potable water supply for any of the towns or cities of the State of Florida.

SEC. 2. That the Sanitary Engineer as provided for by Section 1 of this Act shall only be employed at such times and such periods as in the judgment of the State Health Officer, his expert services may be required.

SEC. 3. That the compensation for services of the Sanitary Engineer provided for in Sections 1 and 2 of this Act shall be fixed by the State Health Officer with the approval of the President of the State Board of Health.

SEC. 4. That all laws or parts of laws in conflict with any of the provisions of this Act are hereby repealed.

SEC. 5. That this Act shall take effect upon approval by the Governor.

From this it will be seen that while the division is desired as an addition to the work of the Board, yet it is not anticipated that a sanitary engineer shall be employed continuously by the Board but shall be engaged only at those times that his services are in demand. It is thought that this will not only be an economical method of administration, but will fulfill all requirements that may be presented for a number of years.

It is interesting to quote in this connection from the *Bulletin of the New York State Department of Health*. In the January, 1910, issue, Mr. Theodore Horton, Chief Engineer for the Department, says:

If we had the opportunity to review the sanitary history of all our civilized communities, we should undoubtedly be surprised to find how similar the experience of each has been; how nearly every one has had to face the same problems which concern public health, especially the problem of disposal of domestic and municipal wastes.

In most cases, these communities have at times, unfortunately, through lack of knowledge and experience of their own, or of other communities, or through lack of failure to seek the advice of some central authority such as the State Department of Health, attempted to solve problems without due regard to proper sanitary principles.

In 1907 and in 1909 the State Board of Health recommended to the Legislature and presented bills, providing for a Division of Sanitary Engineering.

At the 1909 session of the Legislature the Board was given authority "to regulate the method of disposition of garbage or sewage and any other refuse matter in or near any incorporated city or town or unincorporated town or village of this State; \* \* \* to supervise and regulate municipal and county sanitation, not provided for by general rules and regulations for the purpose of suppressing nuisances and communicable, contagious and infectious diseases and other dangers to the public life and health." While this granting of authority in municipal sanitation has resulted in the Board exercising supervision in several instances in the past two years, yet the need for expert sanitary engineering advice and instruction is often felt, and it was not thought that the Board had authority to secure such expert and special advisory service until the Legislature approved of the extension of the Board's personnel.

The communities of Florida are rapidly developing into villages, the villages are growing to towns, the towns within a few years have increased to cities. Each in the past, with some few exceptions (especially among the cities), have established their sanitary conveniences, sometimes without due regard for their own health, and often without due regard for the good health of other communities. The smaller communities and towns of the State, attempting, for the first time in their history, to install sanitary systems, are handicapped by lack of experience of their own, by poor access to the experience of others, and often by lack of funds to obtain the advice necessary.

In this connection, there is then need for a State officer, specially qualified in this work, to confer with and advise the authorities of the smaller communities. There should be, of course, no necessity for the Board to furnish these communities with engineering services other than general advice and outlining of policies, and the establishment of a uniform policy in such matters, based upon such conditions as exist in Florida and which effect water-supply or sewage disposal systems.

The control and prevention of typhoid fever and other water-borne diseases are problems of primary importance in sanitary engineering. The work is almost altogether one of preventing and regulating the pollution of water-supplies and the purification of water courses that can be dangerously polluted. Some laws on the statute books of Florida which touch upon this subject tell the people what they *must not*



do, but there should be some central authority to advise what they can do, and not allow them to go ahead and in an effort to follow the law do something which is detrimental to their health.

The laboratories maintained by the State Board of Health have, as a part of their routine work, the bacteriological examination of public and private water-supply systems, but the collection of specimens of water for examination, and sanitary surveys and investigations into drainage, oftentimes are more important than what can be learned from the laboratory examination. The cooperation therefore of the laboratory and Sanitary Engineering Divisions would result in an increased benefit to prevailing health conditions.

The State Board of Health has had unpleasant experiences occasionally with resort-towns, both with those catering to winter visitors and those entertaining the summer visitors. Many of the sanitary ills existing in these places could be corrected if their municipal officials had the advice of an expert to follow in arranging simple methods to dispose of wastes. Many persons visiting these resorts are from other portions of our own State and it is plainly due them that they shall be protected and their health safeguarded. With a properly equipped Sanitary Engineering Division the Board would find a demand for such services.

It is believed that the State Board of Health, through an expert sanitary engineer, would be in position to cooperate with the Florida Geological Survey in an effort, not only to determine the course of the underground water streams, but to ascertain the danger to be apprehended from a disposal of sewage through natural and artificial wells as is practiced in some counties. It is believed from the evidence at hand that this latter is not only a dangerous method of sewage disposal but that in the future some municipalities will only too sadly realize their mistake. With a sanitary engineer, and the authority the Board has to supervise municipal and county sanitation, such methods, when found to be faulty from a sanitary standpoint, could be at once corrected. The State of Florida cannot depend upon investigations made in the North or the East or the far West, by sanitary engineers in those portions of the States, upon which to base action in supervising municipal sanitation in this State. The conditions there are different from ours; the conditions here must have special study; and then, too, the results of local experiments will have far more weight with municipalities and citizens when made by local engineers than if they are advised to pursue a line of action based upon experiments or ascer-

tained facts presented by some far-away person entirely unacquainted with the condition that may be of interest.

One of the duties of the division would probably be the approval or disapproval of plans for installation of sewage disposal and water-supply system. This would be an excellent work, for it would insure to the interested community a system best suited to their individual conditions and needs, and would prevent establishing a system that would endanger the health of their citizens. And, too, this will be found to result in insuring the building of systems that are planned to be economical and efficient.

And finally, it should be remembered that such a division, to be effective, must be an integral part of the State Board of Health organization, and must be independent of other State departments. Any arrangement to regularly refer questions of this sort to an engineering authority outside the jurisdiction of the Board would be as unwieldy as it would be unsatisfactory. The people of Florida look to the State Board of Health for advice in matters pertaining to public health. The safeguarding of water-supplies, the disposal of sewage, and sanitary engineering in general, are so inextricably mixed up with public health questions and with the work of the Board, that it is well-nigh impossible and undesirable to attempt to separate them. In order to intelligently and helpfully answer the questions that are coming and will continue to come before it, this Board is in need, not of a man trained in general engineering practice, but of a man specially trained in biology and that branch of engineering that has for its object the safeguarding and preserving of public health.

## HOW TO PREVENT MALARIA—NO MOSQUITOES, NO MALARIA

Malarial fevers are transmitted by MOSQUITOES (the *Anopheles*), and by no other means is the infection spread.

Persons contract the disease by being bitten by mosquitoes that have previously bitten a malaria patient.

It is therefore important that persons sick with malaria should have mosquito-nets over their beds and their rooms should be screened to prevent mosquitoes from biting the patient and transmitting the infection to well persons.



It is important, too, that well persons should adopt means to prevent mosquito-breeding and to prevent being bitten by mosquitoes.

#### INFORMATION ABOUT SCREENING.

The netting used should have meshes fine enough to prevent the passage of mosquitoes (at least 16-18 meshes to the inch).

It is important to screen the windows and doors of the house. It is doubly important to screen the beds of fever patients.

Mosquitoes can bite through mosquito-nets when any part of the patient's body is in contact with the netting.

Frequent examinations should be made to see that there are no torn places in the netting or that no mosquitoes have found a lodgment inside.

The netting should be well tucked in to keep mosquitoes from entering.

If mosquitoes are found within the netting they should be killed inside and not merely driven or shaken out.

#### MEANS OF DESTROYING MOSQUITOES.

Mosquitoes live in the vicinity in which they breed. They do not often fly a long distance.

Mosquitoes breed only in water—usually in artificial collections of fresh water.

The young mosquito, or wiggler, lives in water at least seven to twelve days.

Although the wigglers live in water, they must come frequently to the surface to breathe.

Coal oil on the surface of the water prevents the wigglers from breathing.

Destroy the breeding-places and you will destroy the mosquitoes.

Empty the water from all tubs, buckets, cans, flower-pots, vases, once every forty-eight hours.

Fill or drain all pools, ditches, unfilled postholes, and the like.

Change regularly every day all water needed in chicken coops, kennels, etc.

Treat with coal oil all standing water which cannot be screened or drained (one ounce of oil will cover 15 square feet of surface). The oil does not affect the water for use if the water is drawn from below.

Where oil is applied to standing water it must be distributed evenly over the surface.

Put fine wire netting over cisterns, wells, and tanks of water in every-day use.

Places in which it is undesirable to put oil, such as watering-troughs for stock, fountains, etc., can be kept free from wigglers by putting in goldfish or minnows.

Clean away all weeds, grass, and bushes about ditches, ponds, and other possible breeding-places, since these afford a hiding-place for the mosquitoes.

Clear up vacant lots and back yards of all cans, tins, bottles, and rubbish.

First do away with, or treat, all places where mosquitoes are known to breed, and then begin to work on places where they might breed.

Inspect and treat with coal oil, gutters, culverts, ditches, manholes, catching basins, etc., along the roadside. Manhole covers should be screened.

Houses can be cleared of mosquitoes by burning one pound of insect powder or two pounds of sulphur to 1,000 cubic feet of space. The mosquitoes will fall to the floor and should be collected and burned. It is preferable, however, to search out and kill mosquitoes in the early morning when they will be found hiding in dark corners of the house.

Success in mosquito destruction depends upon the cooperation of the members of the entire community.

While the infection of malaria is carried by a single species of mosquito (the *Anopheles*), to insure its destruction it is necessary to destroy all mosquitoes.

In those places where malaria prevails both individuals and communities have an effective method of protecting themselves as indicated above. Use the mosquito-bar over all cases of malaria. Destroy all mosquitoes.

#### QUOTED FROM EXCHANGES

We doff our hats to the exchange which printed this spring poem:

"We  
De-  
Spise  
Flies."

—Chipley Banner, March 23, 1911.

Fight filth, flies and fevers. Prevention is better than cure. It is easier to keep well than to get well. The stable fly is a dirty, dangerous enemy to health and life. Kill him before he is born.—*DeSoto County News*, March 30, 1911.



## FIGHTING THE MOSQUITO.

Over in Pensacola the medical association has taken up an active campaign for the extermination of mosquitoes, beginning this early in order to prevent the insects from getting a head start. By very little trouble the people of Miami may guard against having the pests this summer and should take up the matter now, seriously. Mosquito harbors should be removed—beginning with the half-filled can of water in the back yard, the brush heap, the weeds in the lot “next door,” the uncovered rain-water barrel, the pool of water by the dripping hose faucet. Even though a horde of mosquitoes should be blown into Miami from the Keys, there is no reason for giving them sustenance and breeding-places if each citizen does his duty.—*Miami Metropolis*.

## THE HOUSEFLY AND SICKNESS.

Several days ago the physicians of this city decided to try to create public sentiment against the mosquitoes and flies and attempt to free the city from these dangerous and annoying pests. This is a movement in the right direction and has already been delayed too long for the good of the general public. Already the public health has been endangered and many have been made to suffer because of our failure to destroy the breeding-places of these insects.

Between the two, it is generally conceded that the fly is the lesser evil, but the fly is easier to destroy, for it can be eliminated by cleanliness around the house, while it takes work by the people and by the city to make mosquitoes impossible. In regard to the fly the United States department of agriculture gives the following warning:

“We have shown that the typhoid or housefly is a general and common carrier of pathogenic bacteria. It may carry typhoid fever, Asiatic cholera, dysentery, cholera morbus and other intestinal diseases; it may carry the bacilli of tuberculosis and certain eye diseases. It is everywhere present and it is disposed of with comparative ease. It is the duty of every individual to guard so far as possible against the occurrence of flies on his premises. It is the duty of every community through its board of health to spend money in the warfare against this enemy of mankind. This duty is as pronounced as though the community were attacked by a band of ravenous wolves.”

This will give the people of Pensacola some idea of what the nasty and annoying housefly will do toward destroying the healthfulness of

a community. The last sentence is true and the city boards should do something and do it at once.—*Pensacola Journal*, April 9, 1911.

## MALARIA AND AGRICULTURE

We note in the *Indian Public Health and Municipal Journal* of Lahore, Punjab, (January), an interesting observation on the subject of scientific agriculture and prevention of mosquito-breeding quoted from and based upon an article by Dr. Spencer in the *Transvaal Medical Journal*. Proof is cited in some countries that malaria disappears before the advance of scientific agriculture. Where crude and unscientific methods of cultivation are employed an increase in the prevalence of malaria is found. “A principle of scientific cultivation is the preservation of subsoil moisture by the prevention of surface evaporation. The method necessitates the regular use of the cultivator or Acme harrow after rain or irrigation so that the land is left covered with a thick and even mulch of loose soil. In cultivated soil there are found holes and irregularities which hold water and serve as breeding-places of the malaria (*Anopheles*) mosquito. There are no such breeding-places in land which has been cultivated scientifically; the beautifully even mulch abolishes them. \* \* \*

“A second lesson is made evident by these facts. With the extension of maize and fruit growing it is possible that irrigation will be introduced into those dry districts where malaria has not prevailed, solely owing to the lack of breeding-places for *Anopheles*. Beginners in the practice of irrigation \* \* \* are apt to forget that such crops as maize and fruit under irrigation require also adequate drainage. Stagnant pools and even a water-logged soil may eventually be caused by irrigation when proper cultivation is not carried out or when drainage is not provided; especially, if as is frequently the case, the irrigation shows *trop de zele* on the part of the farmer.

“Thus the *Anopheles* may conceivably be introduced into new districts in the wake of extended agriculture. Where the nature of the crop—as in the case of sugarcane—requires the permanent presence of flumes, trenches, and canals, efficient anti-malaria measures are necessary, such as attention to the construction of the canals, careful removal of weeds, frequent flushing, and stocking with fish which consume the larvae, pupae and eggs of *Anopheles*.



"The conclusion may be suggested that education in the suitable methods of malaria prevention should go hand in hand with education in scientific agriculture in this country."

These interesting observations and conclusions appeal to this office as possibly being of value to our Florida farmers, for it is a well-known fact that malarial fevers prevail in many of the farming sections, and if scientific cultivation of the soil will do away with breeding-places of mosquitoes, especially the *Anopheles*, then it would seem wise for the farmer to adopt such methods, for it will mean a lessening of the prevalence of malaria—a prevention of sickness—and therefore a gain from a financial viewpoint.

### PASTEUR TREATMENT FOR RABIES

#### Modification of Method of Distribution.

The State Board of Health announced, on April 13th, that it had made a modification of its plan for furnishing vaccine (Pasteur treatment) for preventing rabies in the human. Hereafter those persons who are financially able will be expected to pay for the vaccine. This does not mean, however, that other citizens of the State cannot procure the treatment in the same manner that it is now furnished.

The Board will continue to order the treatment as in the past, upon the request of physicians, who will guarantee the price of the vaccine for those who can pay for it. Other persons will be furnished with the vaccine on the same general plan that diphtheria antitoxin is furnished to those patients unable to pay such charges.

The treatment will still be administered at home by the family physician or by a physician designated by the State Board of Health, as has been the method for nearly three years.

This modification is to continue only until such time as the State Board of Health can manufacture its own vaccines. As soon as its building in Jacksonville is finished the Board will prepare this vaccine in its own laboratories and be in position to furnish it free of any cost to the citizens of the State.

It has been the policy of the State Board of Health, in its efforts to prevent the occurrence and spread of communicable diseases, to make possible the proper treatment of dangerous infectious diseases where the cost to the patient would usually be prohibitive, and to advise the public of the State as to methods to be adopted under the circumstances. Therefore, when an exception has been made in the mat-

ter of the treatment of diseases, especially when the character and cost of such treatment made it a hardship upon the physician to procure it or for the patient to pay the charges, the Board has made an effort, and has usually been successful, in arranging for furnishing and paying for these preventive methods. This has saved the State many valuable lives and also prevented, in instances, the spread of dangerous communicable diseases. The costs which accrue from such methods are included in the expenses of the Board and are paid by the citizens in general through the medium of taxation.

In 1907, and even during the previous year, the State Board of Health was impressed with the fact that rabies was becoming more and more a menace to the public health on account of the increase in occurrence and number of cases, and this applied to the United States at large as well as to Florida. This increase was not alarming, but it was of such an extent as to demand consideration from public health officials, and it was decided necessary to place within easy reach of the public a positive preventive of rabies in the human. In November, 1907, the State Board of Health announced that it had perfected a plan whereby the anti-rabic vaccine, popularly known as the Pasteur treatment, would be administered, free of cost, at the offices of the Board at Jacksonville, to those persons who were bitten by rabid animals.

This continued until June, 1909, when an arrangement was made whereby the anti-rabic vaccine should be sent by mail each day to physicians in any part of the State and administered to the patient at his home. The first method eliminated sending the patient to distant parts of the United States to procure the treatment at great expense, not only for the treatment itself, but for transportation and hotel bills; in some cases the cost of the treatment and care being secured through public subscription. The second change in the method of furnishing the treatment, in June, 1909, made it still less expensive for the patient, in that he or she could remain at home, and in fact continue their daily duties, the treatment being administered daily by the physician. The physician collected the fees for his services, and the State paid for the vaccine. Under these methods the State in 1908 administered the vaccine to nineteen persons who had been bitten by rabid animals; during 1909 the treatment was furnished for forty-eight persons, some being treated at the office of the State Board of Health, and others by their physicians at home; and in 1910 thirty-eight persons took advantage of the treatment at their homes.



Whenever it becomes a comparatively simple matter for this character of preventive medicine to be obtained by the physicians of the State, and when placed within the purchasing power of the average individual, it is not believed to be obligatory upon the State Board of Health to longer continue such a plan. However, the modification in the method of furnishing the anti-rabic vaccine, which goes into effect today, is believed will be attended with the same satisfactory results that have been realized for the past three years. This modification means simply that those persons who are unable from a monetary standpoint to pay for the vaccine will be furnished with it free of charge; but there are persons who are in position to relieve the State of this charge and it is felt that they should bear the expense. Especially is this true when it is considered that the Board will have this vaccine furnished to the citizens at a price within the reach of many. There is, then, no reason why persons who have been bitten by rabid animals should not conveniently and economically procure the treatment, remaining at home, and having it administered.

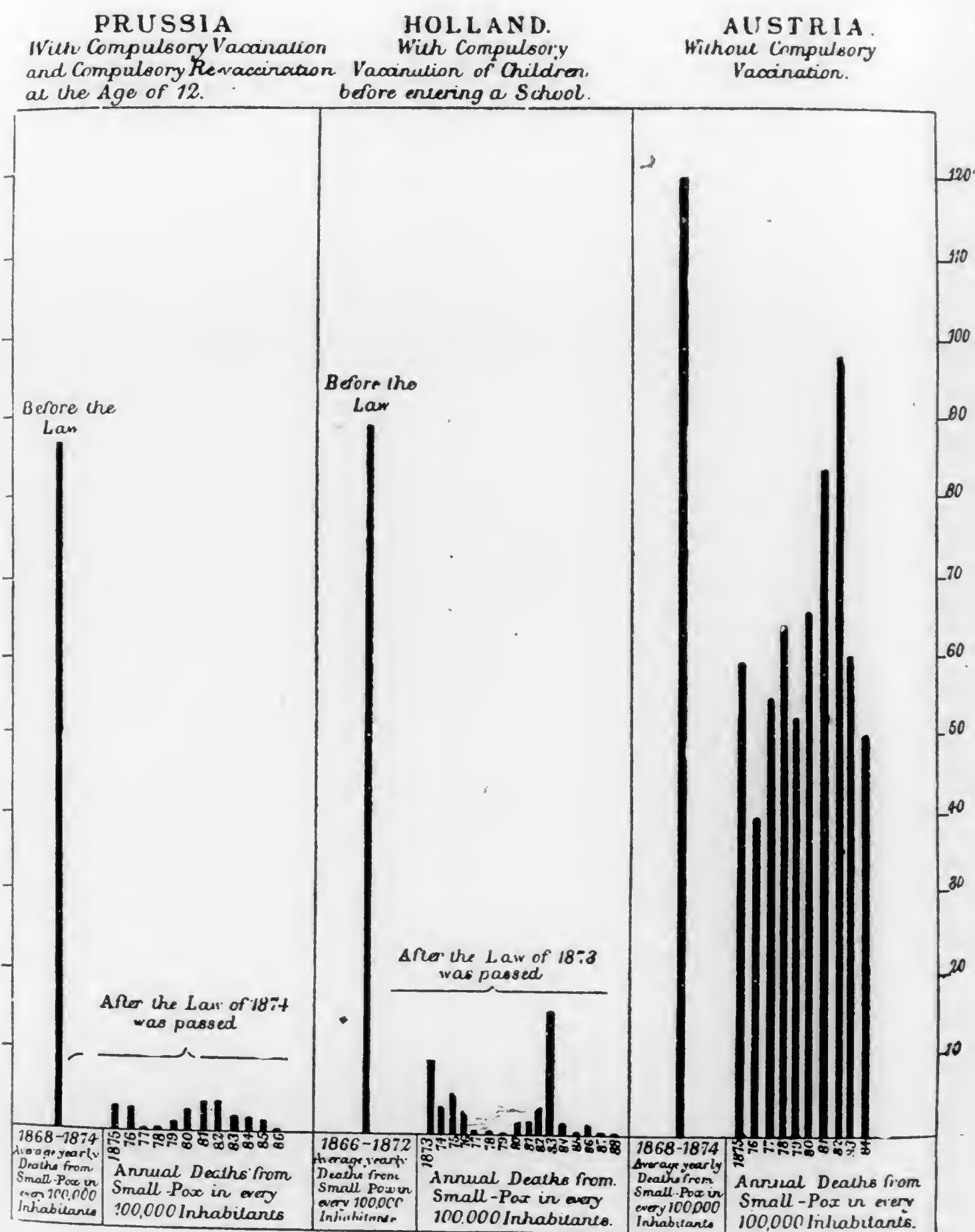
It must be remembered that the State Board of Health is not especially authorized by law to actually treat persons suffering from communicable diseases unless it is their expressed wish and desire that such should be done. It is not obligatory upon any person to take advantage of the plan of the State Board of Health to furnish this treatment nor is it obligatory if a citizen is bitten by a rabid animal for him to have the Pasteur treatment administered. It is, however, recommended by the Board. In an effort to prevent suffering and mortality from communicable diseases, especially those of a dangerous character, and to lessen also the cost of some of the preventive means of attaining this end, it is necessary that some method should be arranged whereby the public can prevent their lives being jeopardized.

To those who are sceptical of the beneficial results of vaccination in stamping out and preventing smallpox, the following diagram and editorial comment from *Collier's Weekly* is commended, for it is extremely interesting and forcefully conclusive:

### ONE THING DONE

"Among the conquests of man the victory over smallpox ranks high. Look at this chart. It will be noticed, of course, that Prussia and Holland have compulsory vaccination, and Austria has not. The figures

in any American city will be found to show the same startling relation to vaccination. We are now passing on to other diseases. For instance,



in the last campaign in New York State, both political parties put into their platforms planks favoring State action against tuberculosis. Man's present record on the globe contains nothing more to his credit than this successful grappling with some of the most powerful and malignant enemies of his race."

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# FLORIDA Health Notes

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*If you do not see fit to protect yourself against smallpox by successful vaccination do not blame anyone but yourself if you contract smallpox.*



## CANCER

**What Our People Should Know About It.—This Dread Malady Appears to Be Increasing and Must Be Combated.—We Have Not Found the Cause, but We Have Learned Much About the Cure.—This Article Gives the Substance of Our Knowledge and the Basis of Our Hopes to Reduce the Mortality.**

### INTRODUCTION.

The searchlight of preventive medicine is constantly being flashed into obscure fields of science. A few years ago medical investigators began to study diphtheria, and as the result of their labors we have antitoxin; they studied yellow fever and malaria and discovered how mosquitoes carry these diseases; they learned how fresh air cures consumption and are engaged in a crusade to eradicate this great plague. During more recent years, emboldened by their success and fortified by their new knowledge, scientists have been battling with those diseases which we have long regarded as incurable. Foremost among these is cancer, to the study of which some of our best minds are now devoted. No cure for this dire malady has been found as yet, and its ravages have become more marked in recent years; yet experience and experiment have yielded a few simple truths, the application of which will surely reduce the mortality from cancer. This bulletin tells these and explains what steps must be taken when the approach of this enemy is suspected.

### WHAT IS CANCER?

Cancer is a disease which has afflicted mankind and many of the lower animals for countless centuries. It is technically described as a malignant tumor, but this definition needs explanation. Any permanent abnormal bodily growth is called a tumor, but as many of these are comparatively harmless those which destroy life are called malignant. A wart, for instance, is an abnormal growth, but as it will seldom result in more than physical inconvenience, it is called benign. A cancer, however, similar to a wart in its abnormal character, is classed as malignant because of its well known danger to human life.

To be more exact, a cancer is an aggregation of cells which resemble in many respects normal cells of the body, but at the same time have points of difference. In a benign tumor, as, for instance, a wart, the cells are in appearance like those found in the surface of the skin; but in a skin cancer the cells grow more rapidly and eventually invade all of the surrounding tissues. Cancer cells may be described as normal cells that have "run amuck" and are not governed by any rules of

order or by any law. They multiply very rapidly wherever they are found and they may be taken up by the tissues and carried through the lymph or blood vessels to portions of the body some distance from the original growth and will there produce another cancer. During their rapid growth cancer cells form some substance, the nature of which is unknown, but which is poisonous and most injurious to life. If the cancer grows fast enough to produce a great deal of this substance the patient soon dies.

Just why these cancer cells arise we do not know, but neither do we know just why a grain of corn will sprout and bring forth a stalk of corn that resembles other stalks in every detail. Such things belong to the most wonderful mysteries in nature. But the fact that we do not know why these things happen is no reason why we should not study the growth and habits of corn and so be better able to cultivate it. Likewise, in the case of noxious weeds or insects; we may not know the exact method of their development, but we can study their growth and so learn how to destroy them. So it is with cancer. We cannot explain exactly why these cells "run amuck" and form cancer, but by studying the cancer carefully with the microscope and by watching its course we can learn a great deal about it, and can cure many cases.

### IRRITATION AIDS CANCER.

One fruit of the recent study of cancer has been the discovery of certain of the conditions which favor its growth, chief among which is chronic irritation. This is well illustrated by the fact that cancer of the tongue and lip almost always occur in men who are smokers. The constant irritation by a pipestem or the end of a cigar in such cases seems in some way to develop those abnormal cells which produce cancer on the lip or on the tongue. Other proofs of this might be cited indefinitely. Cancer of the face comes most frequently at points of irritation, as, for instance, on the nose where spectacles are worn or at the corner of the nose where dirt and secretions from the skin are most likely to accumulate. The natives of Kashmir wear charcoal heaters next to the skin and cancer develops very frequently in the skin where the heater has been worn. The women of India chew betel nuts very constantly and among them cancer of the mouth is quite common, while in women, elsewhere, cancer of the mouth is exceedingly rare. Cancer occurs often in the breast, and in female organs which have been irritated or torn during childbirth.

Cancer is quite rare in the negro race, but is common in the white race all over the world. It rarely occurs in those under thirty-five years



of age except in bone or tendons where a form of malignant tumor called "sarcoma" is occasionally found in the young.

A cancer starts to grow from a single cell or from several cells which multiply rapidly and form other cancer cells. In this way the growing cancer sends finger-like processes into the tissue and becomes a large mass. It frequently breaks down as it grows and forms an open sore or ulcer. All cancers, however, do not break down and form sores, as sometimes the most dangerous internal cancers and the malignant tumors of bone kill before any ulcer occurs.

#### THE PREVALENCE OF CANCER.

Although statistics on this subject do not entirely agree, there seems to be no question about the fact that cancer is decidedly on the increase, even when all deductions are made on account of the greater accuracy of diagnosis in recent years. So far as can be told, the death rate from cancer was 9 per 100,000 of the population in 1850. This increased to 29 per 100,000 in 1880, to 33 per 100,000 in 1890 and to 43 per 100,000 in 1900. The proportion of deaths from cancer in 1,000 deaths from all causes increased from 25.3 in 1890 to 32.9 in 1900. In those parts of the country where the causes of death are always registered, the death rate from cancer alone increased from 55 in 1890 to 70.8 in 1906. From the year 1901 to 1906 the death rate from cancer in this registration area of all United States increased on the average more than 5 per cent., while the rate in other countries has shown an equally alarming increase. In the registration area of this country, 128,442 deaths from cancer occurred from 1901 to 1906, distributed as follows: cancer of the mouth, 4,326; cancer of the stomach and liver, 51,398; cancer of the intestines, 14,934; cancer of the female organs, 20,404; cancer of the breast, 4,683; cancer of other organs not mentioned, 32,697.

These alarming facts indicate that the deaths from cancer will soon equal, if they do not surpass, the deaths from all forms of tuberculosis combined. Such conditions demand the attention not only of scientists, but of the whole people.

#### THE ESSENTIALS OF CANCER TREATMENT.

In facing this situation, and in combating this increasing scourge, three essentials must be borne in mind. We must first of all remember that every malignant growth is at some stage of its existence local and curable by proper treatment. While this statement sounds broad, it is none the less true. The practical application of this doctrine, however, is often difficult and sometimes impossible. Malignant tumors, in-

volving the internal organs, may show no symptoms until they have reached a somewhat advanced stage of development. In other words, it is occasionally impossible to diagnose this class of tumors until the patient is past benefit from any treatment or operation. Then, again, some tumors are of so much greater malignancy than others and spread so much more rapidly that it would be necessary to recognize them when they were invisible to the unaided eye in order to destroy them. These facts, however, do not invalidate the truth of the original proposition. Because we cannot always recognize cancers of internal organs, at an early period, is no reason why we should fail to watch carefully, for malignant tumors in positions where they may be detected in their beginning.

Such being the case, the second essential is obvious: Cancer must be diagnosed at the earliest possible moment. Unfortunately there is no distinct symptom by which the beginnings of cancer can always be recognized. Indeed, the only symptom which is fairly regular is one which people least suspect. Knowing the painful course of cancer in its more usual advanced stages, they anticipate that the outset of the disease must be accompanied by torturing pains. As a matter of fact, cancer is very seldom painful in its early stages. A swelling or ulceration which is marked by pain from the first is not often cancer; a similar swelling or ulceration, unaccompanied by pain, may be cancer. This, to be sure, is not a sufficient guide by which to recognize the malady, but the very uncertainty about it should make the wisdom of this course obvious: in any doubtful swelling, enlargement or ulceration, the person should never wait to see if the trouble will be relieved, but should consult a physician without the least delay. Postponement until the disease is advanced means almost certain death.

The third essential is the prompt and thorough treatment of cancer as soon as possible. The common sense of this course will be obvious on a moment's reflection. As has been pointed out, a cancer consists of a number of cells grouped together. If the cancer is to be cured, it must be by destroying every cell. If a single cell is left, the rapid growth of other cells from this one will soon produce another, and often, a more virulent cancer. It is a homely philosophy which teaches that to rid a garden of weeds, the last weed must be removed. To rid the body of cancer the last cancer cell must be removed.

#### THE METHODS OF TREATMENT.

Science has shown that these may be removed by surgical operation, by which they are simply cut out; secondly, they may be destroyed by certain chemicals which have an especially positive effect upon malignant



cells that they come in contact with, and which are usually applied mixed in the form of paste; thirdly, cancer cells may be destroyed by the X-rays, which have a selective action upon malignant cells on or near the surface, that is, which destroy malignant cells more readily than others.

To repeat, the efficacy of any method of treatment depends upon the removal of every cancer cell. As a cell is so small that it can be only seen with a microscope, one can readily understand how difficult it is to be sure that every cell is removed or destroyed. The skill and experience of the operator is of the greatest importance, whether surgery, paste or X-ray is used. One should never trust themselves for the application of these methods to anyone but a conscientious and trained physician.

There is no difference in the theoretical effect of the various forms of treatment, but each one is suited or limited to certain conditions. The X-ray is serviceable on skin cancers, particularly those about the eye, but should not be trusted to destroy cancer cells beneath the surface. The paste is ineffectual where the cancer is deep and not readily accessible to the paste. The weakness of this treatment is that it is very painful and the destructive action of the chemicals is slow, while the simple properties of the paste are often advertised by unscrupulous men as a "sure cure."

Experience has shown that the third method is the best and safest—an early, thorough and skilful operation. If this be performed by a competent surgeon, it will do all that science enables us to do. It will remove, at one time and without pain, the diseased cells and it may completely eradicate the trouble. As it is very important, however, that every cancer cell be removed and that it be done early, no one but a surgeon specially trained in the work should attempt it. If the operation be delayed, it will be useless; if it be performed by an incompetent man, it may only hasten death.

An operation is generally viewed with dismay and the very prospect of the "surgeon's knife" will often make people submit to torture rather than visit a surgeon. That this is the case is always to be regretted; that it is particularly the case with cancer is most deplorable. A complete operation offers the only hope of cure in any but superficial cancers.

#### SPECIAL FORMS OF CANCER.

The general principles laid down above apply with equal truth to practically every form of cancer. There are, however, certain cancers, affecting particular organs, which need a word of comment.

*Cancer of the stomach* is one of the most frequent types of cancer, generally originating in a simple ulcer of the stomach. Such an ulcer may remain for some months, and even for years before it becomes cancerous, but when the ulcer has become a cancer, it causes a constant, gnawing pain which is seldom relieved by taking food. When one who has previously had good digestion begins to suffer from indigestion, loses weight, vomits frequently and is past thirty-five years of age, he should consult a physician promptly. He may not have either ulcer of the stomach or cancer; but if he has either prompt treatment is necessary.

*Cancer of the breast* starts as a painless lump and is usually found in women more than thirty-five years of age. It is sometimes, though rarely, found in men. The lump in the breast is hard and produces a slight dimpling of the skin or sometimes a pulling in of the nipple. The chances are that any lump which is painless and develops in a woman's breast after thirty-five years of age is cancerous. Lumps occurring at an earlier age are not so likely to be cancerous, but should be removed because they often turn into cancer later on. There is no more hopeful field than a radical operation in early cancer of the breast and there is no more discouraging field than operation in the late stages. In early cancer of the breast, which is recognized and operated on promptly, permanent cure may be expected in about three cases out of four, that is in 75 per cent. of all such cases the patient is well and free from cancer for at least three years after the operation is performed. No one is ever justified in putting off an operation on a growth of the breast in order to wait for it to "develop." It would be just as sensible to refuse to put out a small fire in the house in order to see if the whole house will be destroyed if the fire is not quenched.

In addition to these special forms of the disease, cancer, of course, occurs in many other regions not alluded to here. It may involve any tissue or any portion of the body, though those that have been mentioned are its most frequent locations. Wherever it occurs immediate treatment is the only hope.

#### CONCLUSION.

It has been estimated that there are now eighty thousand cases of cancer in the United States, and that forty thousand deaths occur from cancer every year in the United States. If the patient would co-operate with the physician and the physician would recognize and deal promptly with these growths in the early stages, the mortality from cancer would



be cut down to probably one-fourth of what it is now. This would mean a saving of thirty thousand lives a year in the United States alone.

This is a consideration worthy of every effort on the part of physicians, health officers and the public. Thirty thousand lives to be saved. They can be saved if the people and the profession, knowing the truth, will apply it.—*Virginia Health Bulletin*, May, 1911.

### THE CARE OF VACCINE

Hereafter, the following is to be sent out with all shipments of vaccine from this office:

#### IMPORTANT.

Vaccine should be kept on ice until used.

Vaccine not kept at low temperature soon becomes inert and will not "take."

It has been found\* that:

Vaccine kept at 140° F. 5 minutes was dead.

Vaccine kept at 132° F. 5 minutes was weakened.

Vaccine kept at 98° F. 3 to 4 days was dead. (This is body temperature and about the temperature at which the vaccine would be kept if carried in the pocket.

Vaccine kept at 70° F. one to three weeks was weakened, but not dead.

Vaccine kept at 50° F. 3 to 6 months was still active. (This is about refrigerator temperature.)

Vaccine kept at 10° F. 4 years was still active.

The lesson is:

Keep vaccine in refrigerator until used.

Don't use vaccine that has not been kept at low temperature and expect to get "takes."

Vaccine should be ordered in small quantities and when unused for two weeks should be returned to this office.

\*Dr. W. F. Elgin, Glenolden, Pa.

### ANTI-VACCINATION HOSPITAL

Few places have more repulsion for people than the so-called "pest house." Entire communities rebel against having such institutions in their midst. Vandals go so far as to burn them, as it is believed they did in Key West, and attempted to do in Tampa.

Now it may be that there is something in a name. Perhaps Anti-vaccination Hospital would be less repulsive, especially to those in whose honor the name is proposed. And since it is the anti-vaccina-

tionists that make up the clientele of these smallpox institutions, the name Anti-vaccination Hospital would certainly be appropriate.

And who knows but that in time, under the protecting wing of the *antis*, and with their liberal patronage, and wearing a new and dignified name, the old-time "pest house" might at length become a respectable institution, that communities would fight for, even as they do for penitentiaries. And it would have the advantage that any community could have one as soon as it got *antis* enough to support it.

By all means let us try it.

### FLIES

(*Apologies to Eugene Field.*)

See the fly.

It has not always been a fly—it used to be a maggot.

The children of flies are maggots till they get grown, then they are flies.

Maggots live in manure and eat manure to grow up and be flies.

They had rather be flies than maggots.

Flies eat manure, too.

But they eat a lot of other things that we wouldn't eat.

They eat the stuff a man coughs up when he has consumption.

That is what they go to the spittoon for.

Then the fly specks have the germs of consumption in them.

When flies come out of the spittoons they rub their fore feet together and then rub them on their head. That is the way they wash.

Nice clean flies.

Have one in your coffee?

Flies like open closets because that is where they lunch.

But they will leave the privy any time to get in your mouth when taking your mid-day nap.

When you shoo them away from typhoid stools they get on baby's bottle.

Then we wonder how baby got typhoid fever.

Flies are opposed to sewers.

They think it is a trick to starve them out.

Then they have to live on such scrappings as they can get—the vomit of drunk men, sores on dogs and horses, and the cold meat in the pantry that is saved for supper.

Flies have one eternal enemy—the housewife.

What would she think if you were to screen your house and help her to get rid of them?—*Florida Health Notes*, October, 1906.



Through courtesy of the Department of Health of the State of Virginia, Dr. Ennion G. Williams, Health Commissioner, the FLORIDA HEALTH NOTES this month reproduces from the May issue of the *Virginia Health Bulletin* a most excellent article on Cancer. This is commended to the citizens of Florida as deserving serious attention.

### PUBLIC HEALTH LECTURES

On April 29th Dr. C. T. Young, Assistant State Health Officer, delivered a lecture, "Health and Some of Its Economic Aspects," before a representative audience at Ocala, under the auspices of the Woman's Club. Mrs. E. Van Hood, chairman of the Health Department of the Club, arranged the details of the work for the day. The motion picture theatre used the film "The Fly Pest" and "The Acrobatic Fly," furnished by this office, and much interest was aroused in the subject.

The State Board of Health is gratified with the enthusiasm in the conservation of the public health which has for some years been manifested by the citizens of Ocala and by the Woman's Club in particular, and appreciates the opportunity offered to cooperate with them in the good work.

### WARNING

The glorious Fourth will soon be here.

And with it will come the fireworks.

Toy pistols, blank cartridges, and trivial wounds.

And after a few days lockjaw.

In 1903 there were 466 deaths in the United States from lockjaw following Fourth of July accidents.

They have gradually been reduced.

In 1908 there were 163 deaths from this cause.

Lockjaw is a preventable disease.

But it is not curable.

The way to prevent it is by the use of antitetanic serum.

The time to give the serum is soon after the wound is received, before symptoms of lockjaw develop.

After symptoms develop it is eternally too late.

The State Board of Health will pay for the antitoxin used with the indigent.

That is, when it is used as a preventive.

The Board does not pay for it when administered after symptoms of lockjaw develop. It does no good then.

The *Journal of the American Medical Association* in June, 1910, gave the following simple rules to be followed in the treatment of every blank-cartridge or puncture wound:

#### TO PREVENT LOCKJAW.

1. Inject subcutaneously 1,500 units of antitetanic serum and continue the injections if indications of possible tetanus arise.
2. Freely incise every wound.
3. Carefully and thoroughly remove from the wound every particle of foreign matter.
4. Cauterize the wound thoroughly with a 25 per cent. solution of phenol (carbolic acid) in glycerin or alcohol.
5. Apply a loose, wet boric acid pack.
6. In no case should the wound be closed. It should be allowed to heal by granulation. The dressing and packing should be removed every day, and fresh dressings applied.

### MORE DANGEROUS THAN WAR

Our old, undemocratic idea of honoring the birthday of American independence is expressed in annual outbursts of barbarism which have already done to death more persons than the Revolutionary War ever thought of destroying, according to *Success Magazine*. Indeed, our peaceful celebration seems as much more dangerous than the old style of warfare as smallpox is more dangerous than chickenpox.

To make this fact clear, Mrs. Isaac L. Rice, the dearest foe of our barbarous Fourth, has arranged two columns of figures side by side. The one is taken from Bancroft's History of the United States and shows the American casualties in seven famous Revolutionary battles. The other has been compiled by the *Journal of the American Medical Association*. It considerably understates the casualties on seven recent Fourths.

Battles.	Killed and Wounded	Celebrations.	Killed and Wounded.
Lexington .....	83	July 4, 1903.....	4,449
Bunker Hill .....	449	July 4, 1904.....	4,169
Fort Moultrie .....	37	July 4, 1905.....	5,176
White Plains .....	100	July 4, 1906.....	5,466
Fort Washington .....	149	July 4, 1907.....	4,413
Monmouth .....	229	July 4, 1908.....	5,623
Cowpens .....	72	July 4, 1909.....	5,307
	1,119		34,603

—Key West Citizen, May 10, 1911.



## DOGS AND CATS

The *Times-Union*, discussing dogs in an editorial, asks why are dogs more dangerous than cats? The answer is that the difference in point of danger is one of degree only. They are both susceptible to hydrophobia; both capable of transmitting the disease to other animals including man; but the habits of the two differ materially—a difference which goes a certain way, at least to protect the cat. The cat is a solitary animal, while the dog is gregarious. In his wild state, the cat hunts alone; while the dog in his wild state hunts in packs. If the cat gets sick, he seeks solitude. If the dog gets sick, he seeks companionship. A dog with hydrophobia will likely infect several other dogs before he dies, depending upon their numbers. A cat with hydrophobia will, on account of his retiring disposition, be less likely to infect other cats, dogs, or human beings.

This, be it understood, is not a defense of the cat. There are weighty reasons why the cat should not be allowed at large in the community. It is doubtful if there is any valid reason why it should be.

If the Society for the Prevention of Cruelty to Animals would change its name to the Society for the Prevention of Animal Suffering, then it would have a work on its hands that is worthy of its effort. For what is more pathetic than a stray dog or cat trying to pick its scant living out of garbage cans, covered with fleas, and distributing them in its wake, so starved that it hasn't the strength to scratch, and dragging out the remains of its miserable life, into a kind of death struggle lasting for weeks or months! There is but one way to prevent that needless suffering, and that is to kill the parents of these miserable wretches before they are born. Kill the parents, while yet kittens, or pups, or better still, before the parents are born, instead of postponing it to let them multiply in numbers, multiply the nuisance, and multiply the suffering, and when death finally comes multiply the number of deaths.

## THE DOG WASTE

It has been said that we are a wasteful people. There is more truth in it than most of us are aware of. We waste in places that we little dream of. Our kitchen waste is probably great. We cook more than we should and throw it out as garbage. That is one kind of waste. We buy expensive foods of small food value because it is fashionable or because our appetites have been pampered till they rebel against plain, wholesome food. That is another kind of waste. But these are kinds

that we hear spoken of and in some small measure take cognizance of perhaps. But there are other kinds that escape our notice, or at any rate we seldom hear them mentioned. The dog waste for example. The average dog will eat a pound of meat a day and not feel too well fed. That is worth 25c. Of course they don't all get fed on meat. Some get fed on scraps. Some get fed on garbage that would otherwise be wasted but that is only another form of waste. But they are fed or they would not be here. How many dogs we have, say in Jacksonville, is difficult to conjecture. In 1906 there was a hydrophobia spasm and a St. Bartholomew's day among dogs and some sixteen hundred were killed in a short while. And all the city's dogs were not killed, either. That was five years ago. If the dog population has increased as the human population in the last five years, there must be nearly twice that many here now. Probably three thousand dogs would be a conservative estimate. If these dogs eat, upon an average, five cents' worth of food a day, it costs the people of Jacksonville a hundred and fifty dollars a day to feed them. That is about fifty thousand dollars a year for feeding dogs. These figures are probably conservative, since it allows one dog for every 20 persons, and five cents a day for feeding them. The figures may be too large or they may be too small. But in either event they indicate a woful waste that the people of one city have to stand for.

Another source of waste is the cat. How many cats there are is even more difficult to conjecture than the dogs. But if there are five persons to the family, and an average of one cat to two families, then there are some six thousand cats in Jacksonville. If each cat eats two cents' worth of food a day (less than the equivalent of an egg), then it would cost in the neighborhood of one hundred and twenty dollars a day to feed the cats of Jacksonville, or over forty thousand dollars a year.

It may be objected that the cat pays for his keep killing rats. Certainly, to some extent at least he offsets his cost in that way, but on the other hand the number of chickens that go to his dietary is no small item in itself. Whether the estimates are average or overdrawn or underdrawn, the fact remains that the cat is a source of great economic waste.

What is true of Jacksonville is true of most places of its size.

## DON'T KILL THE DOG

Some people have a penchant for doing the WRONG THING.

Some others have a penchant for doing the right thing at the WRONG TIME.



That applies even to killing a dog.

For instance: the time to kill a dog is before he bites some one. Most people wait till just after.

The time NOT TO KILL A DOG is just after he bites some one, and that is the time most people choose to do it. They usually kill the dog and then telephone and ask if the dog was mad. Of course no one can tell then. And then the patient has to take the Pasteur treatment for fear the dog might have been mad. It is true the laboratory can examine the dead dog's head (if it hasn't been destroyed, which it usually has), and if it finds the Negri bodies it can give assurance that the dog was mad. But that isn't what the patient wants to know. He wants to know that the dog wasn't mad. And the laboratory can't tell that. If it doesn't find the Negri bodies, it can't say that the dog wasn't mad. It can only say that it likely wasn't. For one in a hundred or so are mad when the Negri bodies can't be found.

And then we have to tell the patient that we don't know that the dog wasn't mad. It likely wasn't. But that is all we can say. What will the patient do? Just what you would do. Take the Pasteur treatment and wish the dog had either been killed at the right time, that is before it bit him, or not killed at the wrong time, that is after it bit him.

If the State press will give wide publicity to this—it will not do any harm.

There are so many doctors or other scientists in Jacksonville that they can't agree upon the best plan for suppressing the rabid dog nuisance. Many people there believe that the stray, unmuzzled curs ought to be tenderly caught up in swaddling clothes, carried to the pound and carefully nursed until their cases can be diagnosed by a commission of able-bodied physicians. A similar sentiment respecting convicts has gained ground throughout the State. It appears that there have been many escapes from Chattahoochee.—*Punta Gorda Herald*.

It is to be feared that the *Punta Gorda Herald* is a little sour on the quasi scientists and others about the "humane" way in which they advocate the management of rabies. Perhaps the *Herald* is not in sympathy with that species of "humane" sentiment which expends its sympathy upon everything except (hu)man. If the truth were known it would probably be found that the *Herald* is not in sympathy with that species of protection that applies to horses, cats, curs, quail, and buzzards, to the exclusion of such noxious creatures as certain hawks, owls, English sparrows, and children. The NOTES would venture that the *Herald* would regard a child as a nicer pet than a poodle.

## THE SCARE AS TO SMALLPOX HAS ABOUT DIED OUT

The smallpox scare has abated to such an extent that about the only ones reminded of it are those nursing sore arms as the result of vaccination.

Mrs. ———, upon whom a mild type of the disease developed at the sanitarium recently, has now entirely recovered and has returned to her home in South Gainesville. The hospital, or sanitarium, has been thoroughly fumigated, renovated and disinfected, and is again open for the reception of patients. All danger as to spread of the disease from Mrs. ——— has passed, as the lady is no longer troubled with it and will shortly be enjoying her former good health.

Dr. M. H. DePass, who spent several hours at Fairbanks Friday, states that ———, who has been suffering with quite a severe attack of smallpox at that place for some time, is now rapidly convalescing and will be free from its effects within a very short time. There are no other cases of smallpox at Fairbanks, a majority of the people being vaccinated. Mr. Smith's family were all successfully vaccinated, and no anxiety is entertained there concerning a spread of the disease.—*Gainesville Sun*.

The above is just a little news note. But it is full of significance to those who know how to interpret the situation. It is so unlike what might have happened—what does happen frequently both in this State and elsewhere. For places, like people, have a great diversity of manner. Gainesville is well mannered. When smallpox appeared she might have gone up in the air, but she didn't. Just hearing of smallpox in some neighboring town has caused some places to show very bad manners—but not Gainesville. When smallpox reached Alachua county, Gainesville said: "Come, let us get vaccinated, for it might come here." The word was passed round. The principal of the school sent a note to each family asking if they would have their children vaccinated, and asking if not, why not. The result was that about three out of four were vaccinated. So Gainesville was ready when smallpox came.

And then it came sure enough, as it does to every place sooner or later. A sick lady was sent to the hospital, and lo, it was found that she had smallpox. In the hospital with other people! Now wasn't that a good excuse for Gainesville to go up in the air? Not much. Gainesville is the home of the University. It is up to her to show her good breeding. She quietly and placidly said: "Vaccination will stay the smallpox, therefore get vaccinated." And the people got vac-



cinated. The physicians were busy from morning till night vaccinating those who applied. The State Board of Health furnished vaccine as fast as they could use it, and anon nearly everyone was immune. And smallpox was stayed.

Dr. Arnold would attribute the freedom from hookworm infection among some Europeans to the habit of wearing shoes with wooden soles, and tacitly suggests that such a practice popularized in the Southern United States would assist in elimination of the parasite in America.

The suggestion may have some merit in it. There may be and undoubtedly are cases of hookworm infection acquired through leaky shoes. But compared to those acquired while going barefoot, it would seem not many. The greatest trouble with us is not *what kind* of shoes the people wear, but whether they wear *any* at all; just as with the closet—it doesn't make so much difference *what kind* of a privy is used, just so *some kind* is. The difficulty is getting *any kind* used.

### ANIMALS

This morning a man of wide experience with that group of animals that we are pleased to call the higher, which walks on two feet, and also a wide experience with rats, observed that it would be vastly to our benefit if the tail of the rat could be taken off and attached to certain bipeds.

The rat would profit by it, for he would not have that useless appendage to carry around, and there would be less territory for fleas to infest him.

The bipeds referred to would also profit by having a caudal appendage, since it would reclassify them, and associate them with their nearer kindred.

And the rest of us would profit by the operation, since it would remove from our midst the element that has been prematurely robbed of tails.

The speaker said a Jersey cow was nothing but an educated cow. And then he elaborated it to include the Hunter horse, the Berkshire pig, the merino sheep, the Angora goat, and so on.

And then he said that behind the cow and the horse and the pig and the sheep and the goat was an educated man, that had educated these animals to fit his purposes.

And he might have said behind this educated man was a *well* man—a man free from hookworms, and malaria, and degeneracy, in order

first that he might become educated, and then might educate his animals to a particular purpose.

He was telling of the value of scientific methods applied in practice—how it had been found that if a digger with a spade took more than twenty-one pounds at a spadeful he fell behind, and that if he took less than twenty-one pounds he fell behind, while if he took approximately that amount each time, he performed the maximum of labor. In other words, the application of scientific methods to such a common thing as digging with a spade increases one's working capacity.

So does a dose of thymol frequently increase one's working capacity.

A person may have a few hookworms and not experience any impairment of health or discomfort, but what is the use? Why go about with such a handicap when it could be laid off?

We know a young man who was freed of hookworms when twenty-two years old, and within the next three years grew two and a half inches in height. And yet he had never suffered any apparent aberration of health on account of the infection. It goes to show what being relieved of a handicap may mean.

### VACCINATION

In several counties of the State the agents of the State Board of Health have established and announced that a certain hour or hours during each day would be devoted to vaccinating free of charge all persons who applied. This system has been attended with great success at Tallahassee, Apalachicola and Tampa. It may be that it has been adopted at other points which have not reported the fact to the office. This method is recommended to the agents of the Board in extending this protection against smallpox.

### NO CHARGE FOR VACCINATION

The State Board of Health has during its existence furnished smallpox vaccine, free of charge, to those physicians who applied for it. It has been the desire of the Board that the physicians should therefore receive no fee when they vaccinate citizens against smallpox. This rule has been adhered to by the physicians, with but few exceptions, and the State Board of Health is grateful for the cooperation thus given in preventing the spread of smallpox. But there are times when a physician is called a distance from home, to the residence of



his patients, to vaccinate the inmates of a home, and in these instances it is thought perfectly proper for the physician to charge for the service. The charge is usually made for a professional call, and the fee is only nominal.

If the citizens of a community do not evince sufficient interest in vaccination to call at their physician's office to receive this free of charge, it is but right that the doctors should receive a fee for their trouble and time in extending this protection, but the fee should be paid by the person being vaccinated.

### HERESY (?)

*The Lancet* (London), of April 29th, comes out with a timely editorial dealing with such diseases as measles, whooping cough, and influenza, from the viewpoint that efforts to control them are ineffective.

And here we heave a long sigh. It is too true. They have never been controlled—probably never will be. You may legislate, you may quarantine, you may put up red signs, you may close schools, in season and out of season, or commit any other act of foolishness that an all-wise and impatient public demands, but the diseases in question will continue to stalk through the crowd, till they cease of their own sweet will. One is tempted to exclaim: "What's the use?"

Do what we will, there will always be unrecognized cases, and they will continue to walk the streets, arm in arm with death. For when they assume such innocent masks that the most alert physician fails to detect them even when looking for them, and then they go parading in the crowd, what other results can be expected? No, no. They cannot be controlled. A hundred years of effort have tried in vain to teach us that we cannot corral them, however hard we may try, but a hundred years of failure have not taught us to change our tactics. We still quarantine measles and scarlet fever and diphtheria, here and there spasmodically, while here and there they are left to go their own way, and we never know the difference. Sometimes we do it ignorantly, and sometimes we disinfect and sometimes we don't, but in the end it is all alike. The all-wise people demand that something be done—it makes little difference what, so "something" is done.

It may be that we have arrived at the stage of development that will warrant our inquiring into "what" we are to do in the premises, and how much good it will do? If we have, then we might hearken to the past, and change our tactics a little. We might follow the suggestions of *The Lancet* and concentrate our efforts on trying to lower

the mortality by better nursing. We might leave off some of the "somethings" that we have found are failures, and do "something else" at least. For example, many children die of these diseases (measles, whooping cough, influenza, scarlatina, and diphtheria) that could be saved with a little more intelligent nursing. Why not furnish it? It will be a long step in advance when boards dismiss their disinfecting crews (for these particular diseases) and employ nurses instead. Of course "prevention is better than cure," but cure is better than neither, and the intelligent nurse will prevent far more cases than the disinfecting gang, to say nothing of those that are cured.

Speaking of the anti-vivisectionists, Professor Schafer said that one lady, an authoress and a theosophist, didn't believe that animal experimentation was justifiable, even if 20,000 lives a year were saved by it. That for example in India, where 20,000 people a year are killed by snakes, if a method could be devised which involved experiments upon animals, and which would prevent these deaths, it would not be justifiable to employ it.

Now what do you know about that?

There is a curious thing among gall flies. Some species breed like other higher creatures. Others there be that breed all summer without mating and then mate in the fall and bring forth a winter brood. There are other species that reproduce year in and year out without ever mating. In fact there are no males among them—only females. The males have been abandoned as useless members of society. Now isn't that curious?

Who knows what this suffragette movement may portend?

Louisiana has a health train. Three cars are rigged up and taken over the State from place to place, exhibiting, lecturing, teaching the things that make for health and disease—bringing about an understanding of what to do and what not to do. It is being watched with a great deal of interest. One of the Western States first opened up a tuberculosis train. And then Louisiana went one better. It includes not only tuberculosis, but hookworms, malaria, flies, mosquitoes, and so on and so on.

There is every reason to believe that it will be a success. The agricultural train has—why not the public health train?

## CHANGES IN PERSONNEL

On April 17, 1911, Dr. Jos. Halton, of Sarasota, was appointed agent of the State Board of Health for Manatee county, vice Dr. H. Baer, of Bradentown, who had removed from that county.

On May 5 Dr. F. F. Ferris, of Apalachicola, was appointed agent of the State Board of Health for Franklin county. This addition to the Board's representation in Franklin county was necessitated by the prevalence of smallpox at Apalachicola and because the duties of Dr. B. B. Blount, who has been our agent for many years but lives at Carrabelle, prevented him from giving the attention to sanitary affairs at Apalachicola that the present exigency demanded. Dr. Ferris has established regular office hours for vaccination, at which time the citizens are presenting themselves to receive this protection free of charge.

On May 17th Dr. W. Kilmer, of Orlando, resigned as the Orange county agent for the Board; and on the same day Dr. T. M. Edwards, of Green Cove Springs, who is removing from the State, resigned his position as agent for Clay county. New appointments for these two counties will probably be announced in the July issue of the NOTES.

# FLORIDA Health Notes



## OFFICIAL BULLETIN

Published Monthly at St. Augustine, Florida, by

## STATE BOARD OF HEALTH

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Sent to any address in the State for the asking.

If you receive it without asking, it means that someone else has requested it for you.

When you change your address drop us a card.

When giving change of address, give both the old and the new.

Anything you want to know about the public health we will try to tell you.

Any information you want about communicable diseases of domestic animals we will help you to get.

Address communications to Jacksonville, Fla.

*Hail, holy light! offspring of Heav'n first-born!*

*\* \* \* \* \* thee I revisit safe,*

*And feel thy sovereign vital lamp; but thou*

*Revisit'st not these eyes, that roll in vain*

*To find thy piercing ray, and find no dawn.*

*\* \* \* \* \* Thus with the year*

*Seasons return; but not to me returns*

*Day, or the sweet approach of even or morn,*

*Or sight of vernal bloom, or summer's rose,*

*Or flocks, or herds, or human face divine;*

*But clouds instead, and ever-during dark*

*Surrounds me.*

—Milton.



## OPHTHALMIA NEONATORUM

### Sore Eyes of New-Born Babies

It is a recognized fact that one-fourth of all the blind children in all the blind schools of this country are *unnecessarily* blind. These children have been doomed to lifelong darkness because at the time of their birth their eyes were not properly washed and treated by the attending physician or midwife.

There is no excuse for such negligence. On the part of the physician it is due to carelessness; on the part of the midwife to carelessness or ignorance.

In this issue of the HEALTH NOTES will be found a copy of a leaflet that is now being distributed by the State Board of Health, discussing the subject of prevention of this disease.

At the 1911 session of the Florida Medical Association the State Health Officer of Florida was requested by the Association's Special Committee on Ophthalmia Neonatorum to assist in their campaign of education upon this subject, and the leaflet mentioned is an effort to comply with that request. It is desired that every physician in Florida shall not only recognize the necessity for the prevention of this disease, but that he shall cooperate with the State Health Officer in placing a copy of the leaflet in the hands of every midwife in the State. The leaflet will hereafter not only be mailed to each physician and midwife when requisition is made by them for birth and death certificates, but it will be distributed by the office as all other publications are, as widely as possible.

Much good work in directing the attention of the public to this disease and in securing the cooperation of physicians and midwives in its prevention has been done, and these organizations now feel that the mother, the father, and the future parents of other generations should be made to realize not only the dangers of this frightful disease, but should be taught that it *can* and *should* be prevented.

The State Board of Health is therefore glad of the opportunity to cooperate in this good work, and desires to extend its sincere thanks to The Committee on Ophthalmia Neonatorum of the Florida Medical Association (Dr. E. N. Liell, of Jacksonville, Chairman), and to the Committee of the American Medical Association (Dr. F. Park Lewis, of Buffalo, N. Y., Chairman), the Massachusetts State Board of Health (Dr. Mark W. Richardson, Secretary), the New York State Department of Health (Dr. Eugene H. Porter, Commissioner of Health), and the New York Association for the Blind, for assistance and suggestions

in the preparation of the leaflets, which is practically a copy of that distributed by the New York State Department of Health.

The New York Department of Health and the Massachusetts State Board of Health, under authority of their State laws, distribute, free of cost, to the medical profession and midwives, outfits containing the preventive solution for use in the eyes of every new-born babe.

Joseph Y. Porter, M. D.,  
State Health Officer.

Circular 86.

FLORIDA  
STATE BOARD OF HEALTH,  
Jacksonville.

## DIRECTIONS

### FOR THE

## Prevention of Ophthalmia Neonatorum

### (SORE EYES OF NEW-BORN BABIES.)

A birth infection of the eyes is almost always preventable and curable. Through negligence it has caused the blindness of one quarter of the children in the schools for the blind.

Keep the infected material out of the baby's eyes and then use the preventive solution.

### Directions for Mothers, Midwives and Nurses

**The Disease.** This disease is always due to an infection caused by the entrance of certain germs into the eyes of the baby at the time of, or shortly after birth.

**Its Prevention.** The disease can almost surely be prevented by the exercise of proper care at the time of birth of the child and during the first few days of its life. If the proper precautions are not taken, and the disease develops and runs its course unchecked, the sight is totally destroyed, often within a fortnight.

### Preventive Measures for All Mothers

All women during pregnancy should be instructed as follows: Daily external cleansing should be thoroughly performed with soap and water and a clean wash cloth. Should the pregnant woman have

any irritating discharges, or even profuse white discharge, she should be instructed to *immediately* consult her physician or the nearest dispensary.

### Preventive Measures for All Children at Birth

Immediately after the delivery of the head, before the delivery of the body, the eyelids should be carefully cleaned by means of absorbent cotton or a soft linen cloth dipped into warm water that has been boiled or into boric acid (saturated) solution. A separate cloth should be used for each eye, and the lids washed, from the nose outward, free from all mucus, blood or meconium. These cloths should be burned after using. No opening of the lid should be attempted at this time. Also the lips and nose should be in like manner wiped free of mucus, and the little finger, wrapped with a piece of moist linen, should be passed into the child's mouth and any accumulated mucus removed by an outward sweep of the finger.

### Use of Prophylactic Solution

As soon after birth as possible the eyelids should be again wiped clean of mucus, and two drops of a one per cent. solution of nitrate of silver should be dropped into each eye. *One application only of the silver solution should be made*, and ordinarily no further attention should be given the eyes for several hours.

Each time that the child is bathed, the eyes should be first wiped clean, as above described, with the boric acid solution.\* The hands of the person charged with the care of the child must be washed with soap and dried with a clean towel before the eyes of the child are touched. Everything that is brought near the eyes of the child must be, in every instance, absolutely clean.

The cotton that is used on the eyes of the child must, in every instance, be immediately burned after it is used. The water, towels, old linen and the cotton that have been used on the mother must, under no circumstances, be applied to the child. The air of the bedroom must be kept as pure as possible, and the linen should never be dried in the sick room.

### What Must be Done When Inflammation of the Eyes Appears

When the lids become red and swollen, and are gummed along their borders, and when mattery discharge is mixed with the tears as

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\*Boric acid costs little and may be bought of any druggist without a doctor's prescription.

the child sleeps or cries, a physician should be called immediately, or the child taken to the nearest dispensary. Each hour of the delay adds to the danger. While waiting bathe the eyes of the child every half hour with pledgets of cotton dipped in a solution of boric acid. Open the lids wide and allow the solution, which should be warm, to flood the eyes and wash out any matter which may have gathered there.

The child should not be fondled and nothing which has been used about the eyes or face should be used for any other purpose. All of those in the home should be warned of the danger of catching the disease by getting the matter into their own eyes. Do not listen to those who say it will amount to nothing, or to those who say to bathe the eyes of the child with the mother's milk (the milk is a means of spreading the germs of this disease). Such advice is bad; the delay may result in blindness.

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This circular is a modification of that published by the New York State Department of Health.

### NOTES ON OPHTHALMIA NEONATORUM

The Committee of the Florida Medical Association directed attention in its report to the economic character of this disease and its prevention. The proper care of the eyes of the new-born and the adoption of precautions to prevent the disease are comparatively inexpensive. On the other hand, it has been estimated by the New York Association for the Blind that the average cost to the State of a person, blind from birth and dependent through life, approximates \$10,000.

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In an effort to obtain statistics regarding the disease in Florida, The Florida School for the Deaf and Dumb, a year ago, found that in twenty-six instances twelve inmates of the School furnished a history, through their parents, of blindness at birth or within three weeks; two were regarded as suspicious, and twelve were due to other causes. The lesson here is that if the physicians or midwives who attended the births of the twelve children first mentioned, had exercised proper care of the eyes, the blindness would have been prevented, at least in a majority of these cases.

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Dr. F. Park Lewis, of Buffalo, in his report as Chairman of the Committee on Ophthalmia Neonatorum of the American Medical Asso-



ciation, directs special attention to the matter of treatment of the infection after its appearance, and says: "If infection occurs, its treatment should be immediate and under intelligent medical supervision. Subsequent to prophylaxis the newer and less irritating silver salts are far safer in the hands of the physician who is unused to the treatment of the eyes and it should always be made clear that the treatment of a birth infection of the eyes **MUST NEVER BE UNDERTAKEN BY A MIDWIFE OR NURSE.** When inflammation develops, a physician should immediately be called."

There is one conclusion universally arrived at by all organizations and committees studying this disease: Midwifery must be supervised or suppressed. The supervision of midwives can only be done by a State law requiring an examination and licensing in the same manner that physicians, dentists, pharmacists, accountants, embalmers, and others are required to undergo.

The suppression of midwifery is hardly feasible nor possible, but women who follow this trade should show a proper knowledge of what they are undertaking.

The New York State Department of Health suggested in the first circular it published upon Ophthalmia Neonatorum that the Secretaries of County Medical Societies prepare a pledge and obtain to it the signature of every physician in his county, in which it would be agreed by each physician to adopt some approved method of prophylaxis in his obstetric practice and to use his influence to secure the cooperation of his professional associates to the same end. Should these pledges be given and observed by the medical profession as a whole, the battle now being waged will be more than half won.

## REMEDIES AND PREVENTIVES AGAINST MOSQUITOES

### INTRODUCTION

Since the discovery that mosquitoes are not only nuisances, but are also conveyors of malaria, yellow fever, filariasis, and dengue fever, a great deal of remedial work has been done by individuals and communities. Many remedies and plans of action have been tested on a large scale, and what follows is a summary of the results.

## PROTECTION FROM BITES

### PROTECTIVE LIQUIDS.

Spirits of camphor rubbed upon the face and hands or a few drops on the pillow at night will keep mosquitoes away for a time, and this is also a well-known property of oil of pennyroyal. Neither of these substances is durable; that is to say, a single application will not last through the night. Oil of peppermint, lemon juice, and vinegar have all been recommended, while oil of tar has been used in regions where mosquitoes are especially abundant. Oil of citronella is one of the best substances to be used in this way. The odor is objectionable to some people, but not to many, and it is efficient in keeping away mosquitoes for several hours. The best mixture tried by the writer was sent to him by Mr. C. A. Nash, of New York, and is as follows:

Oil of citronella .....	1 ounce
Spirits of camphor .....	1 ounce
Oil of cedar .....	1/2 ounce

Ordinarily a few drops on a bath towel hung over the head of the bed will keep the common house mosquitoes away. Where they are very abundant and persistent a few drops rubbed on the face and hands will suffice. Even this mixture, however, loses its efficacy toward the close of a long night. It is the habit of the yellow fever mosquito, *Aedes (Stegomyia) calopus* Meig., to begin to bite at daylight. By that time the average person is sleeping very soundly, and the effects of the mixture will have largely passed away. It follows that in the Southern States where this mosquito occurs these protective mixtures are not supposed to be as effective as they are in the North. As a matter of fact, however, this last mixture, could it be applied shortly before dawn, would be as effective as under other circumstances.

A mixture recommended by Mr. H. E. Gane, of New York, is as follows:

Castor oil .....	1 ounce
Alcohol .....	1 ounce
Oil of lavender .....	1 ounce

This mixture was prepared for the purpose of avoiding the odor of the oil of citronella.

Oscar Samostz, of Austin, Tex., recommends the following formula:

Oil of citronella .....	1 ounce
Liquid vaseline .....	4 ounces



# MOTHER'S MILK FOR MOTHER'S BABE COW'S MILK FOR CALVES

(God's Plan)



## The Long vs. The Short Haul

70 percent of city babies get their food through a tube 60 miles long. It takes about 36 hours—often 42 hours—for the milk to run from the cow end of the tube to the baby end of the tube.

This tube is open in many places and baby's food is frequently polluted. It is often wrongly kept in overheated places.

Then there may be a diseased cow at the country end of the tube.

And Yet Some People Wonder Why So Many Babies Die!

On the other hand the mother-fed baby gets its milk fresh, pure and healthful—no germs can get into it.

To Lessen Baby Deaths Let Us Have More Mother-Fed Babies.

You can't improve on God's plan.

For Your Baby's Sake—Nurse It!

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This mixture greatly retards the evaporation of the oil of citronella. Mr. B. A. Reynolds has used successfully in New Orleans 20 minims of oil of citronella to the ounce of vaseline or lanolin.

A 5 per cent solution of sulphate of potash has been recommended as also the oil of cassia. Pure kerosene has also been used extensively in the Philippines.

The above is extracted from *Remedies and Preventives Against Mosquitoes*, by Dr. L. O. Howard, Farmers' Bulletin 444 of the U. S. Department of Agriculture.

After discussing remedies against mosquitoes as above, Dr. Howard continues, showing the necessity for the use of screens and canopies to protect against mosquito bites; explains how insecticides may be used to advantage; describes apparatus for catching adult mosquitoes; discusses remedies for mosquito bites; and deals explicitly with the question of the abolition of mosquito breeding places.

The bulletin, consisting of fifteen pages, is considered by the NOTES one of great value, and upon application to the office of the State Board of Health, Jacksonville, copies will be gladly furnished.

Pellagra seems to be on the increase in Florida. Which does it mean: More cornbread or infected sand flies?

The other day a man asked why the NOTES have so much to say about vaccination.

The answer was: "Smallpox."

If you get vaccinated and it *doesn't take*, then you won't have smallpox will you?

If you get vaccinated and it *does take* you won't have smallpox, but if it *doesn't take*, it probably means that the virus was inert. Better try again.

A party was driving out through the country and stopped to enquire the way. A man was lying on the veranda on the floor with a chair turned down for a pillow. Asked the road, he didn't rise, but lay there and gave direction, pointing when necessary with his toe.

Will some hookworm expert please make a diagnosis.

Reminds us of Kate Douglas Wiggin's Jabe, who, when asked if he wasn't ashamed to lie in bed so late, made answer: "Yes'm, but I ruther be ashamed than to get up."



### TO AID IN PREVENTING FEVERS

"The State Board of Health announces through HEALTH NOTES, a regular publication, that malarial fevers are caused by mosquito bites from mosquitoes that have bitten someone with the fever, and adds that malarial fever cannot be contracted except in this way.

"In another chapter it points out that typhoid fevers, and other fevers which are named, are possible through the agency of the common house fly. The house fly carries the disease from infected articles and then may light upon foods that are eaten and in this way a person contracts the typhoid germs.

"With these two nuisances destroyed malarial and typhoid fevers would be wiped out of Florida. It seems a little thing to do, but it is such a Herculean task that it cannot be accomplished without the cooperation of the entire population.

"It is a known fact that this cooperation cannot be obtained, and the work can be only partially carried on by a few conscientious residents. But there is a class of people that should use every precaution, and that is the class of people that have either kind of fever cases in their families.

"Where there is a case of fever the bed should be thoroughly screened to keep the patient away from the mosquitoes and flies, and, if this is done, no matter how many mosquitoes and flies there may be around the house the disease will not be carried from this particular patient to any others of the family, or to the neighbors.

"Persons having fever cases in their homes owe this much to the public, and if everyone will attend to this matter, fever cases will be very few in Pensacola.

"There is a systematic campaign on against the fly and the mosquito and they are both gradually being destroyed, but the people with sickness in their homes, by exercising a small degree of precaution, can aid in the work to make Pensacola the healthiest city in the world."—*Pensacola Journal*.

This from the *Pensacola Journal* is very encouraging. Not that we are very sanguine about the immediate eradication of malaria and typhoid from the State, but that with cooperation of that kind, we will gradually come to have less and less till at last we will be practically free from these two diseases.

Yes, all cases of malaria should be treated under screens. But that is not enough. It is not enough that the malaria patients should be treated under screens, for there are a certain number of persons harboring the malarial parasites that do not have active symptoms. The writer took blood smears from 100 children at a certain point in the State, children that were apparently well, and found that twelve of them had malarial parasites. These children did not have malaria in the sense that they were sick. But they did have it in the sense that they could infect mosquitoes. Let a mosquito bite one of these carriers, as they are called, and he will become infected. Then after a period of some eight days or so, he can transmit the parasite to some one else. So you see it is not enough that those with active symptoms should stay out of reach of mosquitoes, but carriers should also be screened.

Nor is it enough that sufferers and carriers be screened. That would protect the mosquitoes from infection and would go a long way toward eradicating the disease. Would eradicate it in fact if carried out with sufficient thoroughness. But there is the rub. The sufficient thoroughness. That is hard to attain. Hence a few mosquitoes will become infected. And these in turn will infect a few other people, unless they, too, are screened.

So summed up or boiled down it will be seen that every person who has malaria, or who is a malaria carrier, or who doesn't want to get some of the parasites injected into him, had better be protected from mosquitoes; those who have it already to keep from infecting mosquitoes; malaria carriers to keep from infecting mosquitoes, and persons who don't want it to keep mosquitoes from infecting them.

### TIT FOR TAT

Antis do give vaccination the d—l, and then  
Smallpox gives the antis the d—l.

### THE ONLY RATIONAL METHOD OF SMALLPOX MANAGEMENT

The other day the City Council of DeFuniak Springs passed a resolution urging "that vaccination be universally recognized and practiced as the only rational method of smallpox management."

Won't you just stop and read that over and emphasize the word *only* for it is full of significance.

That is to say, quarantine is not a rational method.

Isn't that a very heterodox doctrine?

Haven't we always resorted to quarantine?

Haven't we always used a shotgun to enforce quarantine?  
How will DeFuniak defend her heterodoxy?

How will she clear herself in the eyes of the world after having broken away from the faith of the fathers?

Just put the questions up to her—DeFuniak is abundantly capable of defending her position. She knew what she was saying and why she was saying it. It is not her style to go off at a tangent. The people of DeFuniak are largely of Scotch descent. They were pioneers in America and pioneers in Florida. So far back as 1828 a band of these sturdy Scotchmen took their families and their ox carts and came across country to Euchee Valley, which is now some miles distant from DeFuniak Springs. There they wrought their fortunes from the soil and builded well as became Scotch people. When the Civil War broke out they had a church of some three hundred members and one of the best schools in the State.

After the railroad came through Walton county, many of them moved to DeFuniak Springs where they formed the nucleus of what is today one of the most cultured places in the State.

It was here that the State Normal was located for many years till it was abolished by the Buckman Bill, and since that time a Presbyterian School, known as Palmer College, has taken its place.

Is it any wonder that DeFuniak takes an advanced position?

Now ask her why she considers that quarantine is not a rational method of smallpox management and she will answer:

"It is impossible to control disease by quarantine unless all cases are quarantined."

"It is impossible to quarantine all the cases of smallpox because they are not all reported."

"It is impossible to get them all reported because they are not all recognized."

"It is impossible to get them all recognized because many cases are so mild that they never see a doctor, and because even the skilled physician is not always able to recognize all cases because of their mildness."

"Therefore:

"It is impossible to control smallpox by quarantine."

Besides, they will continue:

"Quarantine without guards is no quarantine. It is only a make-believe."

"Quarantine with guards is only a bluff, for has the guard the right to shoot? Who has the right to give the guard the right to take human life? Then what is your guard service but a bluff? And would you have your State Board of Health engage in a bluff game of this kind? Would you have your State Board of Health spend thousands of dollars in the prosecution of a bluff game that gives no protection?"

Then what would you say?

If pressed DeFuniak would go on:

"Every dollar spent in dodging smallpox is wasted for it leaves us no better off than we are at present. The only thing that affords us any permanent protection is that which has for its object the *prevention* of the disease and not merely its *postponement*."

Then she would add:

"VACCINATION PREVENTS THE DISEASE, QUARANTINE ONLY POSTPONES IT."

And if you were not satisfied by this time, she would give you some more till you were satisfied, for she has plenty more like it for you.

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Whom do you send for when the smallpox gets you?  
The antivaccinationist of course.

---

When is the best time to get vaccinated?  
Before you get smallpox.

---

How often should one get vaccinated?  
Every few days till it takes.

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Not long ago a Florida editor came out "agin'" vaccination.  
He is now "agin'" smallpox.

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Through the courtesy of the Florida Delegation in Congress the State Board of Health has been supplied with limited quantities of the following Farmers' Bulletins of the United States Department of Agriculture:

No. 85—Fish as Food.

No. 93—Sugar as Food.

No. 127—Important Insecticides.

No. 152—Scabies of Cattle.

No. 379—Hog Cholera.



No. 391—Economical Use of Meat in the Home.

No. 444—Remedies and Preventives Against Mosquitoes.

No. 449—Rabies or Hydrophobia.

No. 450—Some Facts About Malaria.

These bulletins are for general distribution to the citizens of the State, and as long as the supply lasts, they will be gladly furnished upon request.

### FOR THE PHYSICIAN

Hon. N. P. Bryan, United States Senator from Florida, has furnished the State Board of Health with a supply of Bulletin No. 135, of the Bureau of Animal Industry, "A Comparative Study of Methods of Examining Feces for Evidences of Parasitism." The physicians of the State who do their own laboratory work in examining specimens for hookworms or other animal parasites will find this bulletin of much value, for it discusses the several methods used in examining human feces and gives the results of tests as to finding a method that will give the surest results in the shortest time.

Upon application, the bulletin will be furnished by this office so long as the quantity is not exhausted.

### COMMUNITY CHARACTERISTICS

Communities have characteristics just as individuals do. Of course the community characteristic is the dominant characteristic of its component citizens. But allowing the citizen to get lost in the shuffle, you can acquire a very definite community character.

For instance: I have known a man turn a hungry beggar from his door—seen him drop a penny in the contribution basket, and totally ignore the distress of his neighbor, whatever that distress may be, until his neighbor happens to get smallpox, and then all at once he becomes very solicitous. Not that he does anything himself—no, no. He just wants the neighbor taken care of. Remarkable how humanely inclined people become for others with smallpox. Some communities act the same way.

Then again the individual can do just as opposite to that as he can improvise. So can the community. I remember an instance about eight years ago when smallpox appeared in a certain community in the western part of the State. I was detailed over there to—do something—whatever was considered necessary to arrest its spread. I found the railroad agent at his post with smallpox. A small boy was sitting

on the steps of the station house picking at his scabs. Several others showed evidence of recent infection. The entire community was out to see the train come in. I was introduced by the man that had reported it. Asked what I thought it was I replied that it was smallpox, and asked the counter-question what did they think it was. They gave me the horse laugh. If you have ever had the horse laugh you know how uncomfortable it makes you feel. I tried to press the case home by showing the seriousness of the disease sometimes. The crowd gathered round to jibe me and ask impertinent questions. When I suggested vaccination, I got some more horse laugh. One man befriended me enough to take me to one side and tell me that if it was smallpox, they all wanted to get it while it was mild, that the next time it comes round it might go hard with them. He said they had a party there the week before at the little hotel and that no one was admitted that didn't have this disease, or who didn't want it and he assured me that the party was well attended. He gave me some kind advice about allowing them to attend to their own business and some further suggestions along the same line. I was glad enough when time for departure came. I reported the matter to the State Health Officer and there it ended.

But they have never had smallpox there since.

### QUESTION

When smallpox spreads rapidly enough to clean up a community in six months if unmolested, how long will the agony be drawn out by quarantining half the cases? (We rarely hear of more than half).

### THE SHORT FEVERS OF THE TROPICS

The study of the short fevers of the tropics seems destined to be of considerable importance to Northern physicians. As previously stated, British Army surgeons are classifying the cases into three-day, seven-day and ten-day types, from all of which malaria, typhoid, Malta fever, as well as dengue are definitely excluded. Lt.-Col. J. J. Gerrard, in the *October Journal of the Royal Army Medical Corps*, shows that three-day fever is found in Malta almost exclusively in the summer as though it were climatic, indeed, many cases are so closely connected with a prior sun exposure as to have been labeled "thermic fever." Nevertheless a living cause is not disproved as it is the season when insect transmitters are at work. Seven-day fever is more evenly distributed throughout the year, but as none occurs in the coldest



months the same remarks apply to it as the shorter form. Ten-day fever is evenly distributed throughout the year, but as these cases are becoming more and more rare, it is evident that they were mostly unrecognized Malta or typhoid fevers or other infections now recognized. Perhaps these simple continued fevers will disappear and the only cases to clear up will be the ephemeral fevers and febriculæ. This all shows satisfactory progress, but it would be well for our city physicians not to consider any summer fevers as climatic or thermic until they have excluded all known causes—particularly infections and auto-intoxications. It is certainly a good sign of increasing ability in diagnosis to note the rapid decline of "simple continued fevers," which formerly figured so largely in our hot weather practice.—*American Medicine*, April, 1911.

### CHANGES IN PERSONNEL

On May 31st, Dr. L. C. Fisher, of Green Cove Springs, was appointed Agent of the State Board of Health for Clay county, vice Dr. T. M. Edwards, whose resignation was announced in last month's NOTES.

Captain Cunningham, Calcutta, has studied the effect of sunlight on fleas. Garments were spread out on sand with fleas on both the upper and underside. Those on the upper side died in ten minutes under the influence of the Indian sun. On the under side it took about forty-five minutes to kill them. But the point is they died.

Who said sunshine is not a good disinfectant?

### RESULTS IN EMBALMERS' EXAMINATION

The spring examination for embalmers' license was conducted by the State Board of Health at the undertaking parlors of Neal & Brotherton Co., Jacksonville, on May 13th, 1911.

Sixteen applicants for license were present, eleven of whom failed to obtain the necessary percentage (75%).

The five successful applicants are as follows:

V. B. Keller, St. Cloud, Fla.

R. A. Rozier, Panama City, Fla.

G. Potsdamer, Live Oak, Fla.

General H. Hall, (col.), Jacksonville.

Lawton L. Pratt, (col.), Jacksonville.

Unless request is received from more than five persons the usual fall examination will be deferred until the spring of 1912.

# FLORIDA Health Notes



## OFFICIAL BULLETIN

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Any information you want about communicable diseases of domestic animals we will help you to get.

Address communications to Jacksonville, Fla.

"The charm of life, that which gives it zest and meaning, is to do useful work for our time, our place and our generation; to realize that we are needed in the progress of things, and even at times appreciated; to give more than we receive; to place usefulness ahead of emolument; to push the world a little inch up-hill, to plant a flower in everybody's garden but our own."

—John W. Alvord.



## A PUBLIC HEALTH DEPARTMENT! IS IT ESSENTIAL TO PROGRESSIVE HEALTH MANAGEMENT?

Much has been said of late about a Federal public health department.

The NOTES has taken little part in the discussion. But it has been busy putting two and two together. Having maintained a conservative attitude, and having been engaged in public health work for many years, and having neither friends to reward nor enemies to punish, and courting no favor, nor fearing no criticism, within or without the ranks, it may be able to deliver a calm judgment in the premises.

It is proposed by the advocates for a Public Health Department, that all the existing public health agencies should be assembled into one department, with a secretary in the President's cabinet, which procedure, it is alleged, will prevent duplication of work, make the medical officer in charge independent of a superior, and add to the dignity of the service.

To the practical legislator there are some well nigh insurmountable obstacles in the way of a public health department. There is an inherent objection, by Congress—representatives of the people—to multiplying cabinet officers, and the necessity must become urgent before it will be seriously considered. And even then the advantages must be poised against the disadvantages; the proposed method against the present one; and then when the possibilities of the existing method are subtracted from the possibilities of the proposed, it is only what is left that the practical legislator will consider of any vital importance.

When that subtraction is made there isn't much left. Is there? A department would have no more power than a bureau to enter a State. The Department of Agriculture, for instance, in the control of diseases of domestic animals, can only exercise independent jurisdiction along State lines and in an interstate authority; so can the Bureau of Public Health and Marine-Hospital Service in the control of human diseases. Indeed it is a universally recognized principle of our government that the police powers are reserved to the State and cannot be encroached upon by the Federal government, and that the sanitation of a State is a part of the policing of it.

An assembling of the several public health agencies simply means transferring certain bureaus and parts of bureaus from one department to another; the Bureau of Vital Statistics from the Department of Commerce and Labor to the Department of Public Health; a part of the Bureau of Animal Industry and of the Bureau of Chemistry from

the Agricultural Department to the Department of Public Health; and the Bureau of U. S. P. H. and M. H. Service from the Treasury Department to the Department of Public Health.

This assembling of the several public health agencies into one department is impossible, for the Army Medical Service will still be the Army Medical Service, and will be unaffected by such an exchange; and the Navy Medical Service will still be the Navy Medical Service and will be unaffected by it. The actual assembling will be the transferring of the Bureau of Vital Statistics from the Department of Commerce and Labor to the proposed Department of Health; and the similar transfer of parts of the Bureau of Animal Industry and of the Bureau of Chemistry to the proposed Department of Public Health; and something done—the Lord knows what, to the Bureau of Public Health and Marine Hospital Service, wherein it will be transferred from the Treasury Department to the proposed Department of Health and made over into a department with a new head and whatever else the fortunes of politics might make.

It has not been shown just what advantages would be derived from such transfers of bureaus. Nor for that matter has it been shown that any advantage would be derived therefrom. For example, what advantage would be derived from transferring the Bureau of Vital Statistics from one department to another, where it would still be a bureau? Or a part of the Bureau of Animal Industry? Or a part of the Bureau of Chemistry? Or the Bureau of P. H. and M. H. Service, where it would be absorbed, more or less disorganized, and reorganized by, if not a less capable director, at least one that is less familiar with the needs of the service? The practical legislator must be shown the advantages of such changes before he will seriously consider them.

The second argument advanced by the advocates of a department is that it will prevent a duplication of service. The practical legislator will say that sounds good, but he will want to know where there is a duplication. That the Bureau of Animal Industry has a laboratory and that the Marine Hospital Service has a laboratory does not say that there is a duplication of service. Indeed each bureau has several laboratories, but it has not come to our notice that any two of them are doing the same work. The legislator will need to be shown; he will not take it on faith.

That a department will lend an added dignity to the Public Health Service, no one will deny, but that dignity will make for better health



will also have to be shown. And until the advocates of the measure can show to the satisfaction of congress that there will be some distinct gain in efficiency by transferring these several bureaus from one department to another; and that such transfer will make for economy by preventing a duplication of work; and that the added dignity of a department over a bureau will make for more efficient service; one or all of these, they are going to have an uphill pull trying to convince Congress of the wisdom of tearing down the efficient system already in vogue and building up an untried one to take its place.

And the weakness of the claimants for a department will be all the more apparent when we come to consider some fundamental objections to it, all of which have got to be more than neutralized by the advantages of the proposed system before the legislator can show even a reasonable excuse for the change.

One of the fundamental objections is found in the fact that it is not in keeping with our principles of government to limit the President in the selection of the members of his cabinet. He is therefore free to choose for the secretary of the proposed department whoever he sees fit, whether layman or professional man, and if professional man, he is still free to choose from whatever school or cult or "ism" or schism he sees fit. And with the hundred and one quasi-medical creeds extant in the United States, all enjoying pretty much the same liberties that the hundred and one religious creeds enjoy, it is a matter of considerable chance which creed might enjoy the distinction of being represented in the cabinet. For it is to be remembered that we are legislating not for the present generation alone, but for generations yet unborn.

This pitfall can't be escaped by simply providing that the Assistant Secretary of the Department be a medical man, etc., for that defeats the original purpose of the act, which is to get the medical man in the cabinet, so that he won't have to go through a superior officer to make recommendations. Or to say it another way, as it stands now, the medical man at the head of the public health bureau has a superior officer, the Secretary of the Treasury, between him and the cabinet. As it would stand then, the medical man (known in this instance as the assistant) would still have a superior officer, the Secretary of Health, between him and the cabinet. A veritable case of "tweedledum and tweedledee."

There is still another obstacle connected with these hundred and one several cults, "isms," schisms, and creeds. It might be illustrated

by the capital situation in Florida. The capital is located at Tallahassee. Jacksonville, Gainesville, St. Augustine, Ocala, Pensacola, and probably a hundred other places would like to have it. Every little while one makes a pull for it. Whenever it does, it doesn't get the support of any of the other aspirants, because they all see their ultimate hope vanish with the removal from where it is. And this explains the existence of the organization known as the Medical Freedom League—an organization made up of quasi-medical creeds, cults, "isms," and schisms, all to oppose the creation of a department of public health.

Now it is perfectly feasible to have a department of health in Cuba. There the sciences are all under the university of Havana. Nothing scientific is recognized that does not have the stamp of approval of the university. This does away with the complication arising from a multiplicity of cults. And withal is an admirable system. But Cuba, it is to be remembered, is in a class to itself in public health affairs. A combination of circumstances not to be found elsewhere, in a republican form of government, has resulted in a public health department, the efficiency of which is just as rare. This combination, among other things, makes a department both feasible and necessary. But in Europe it is quite different. The two leading monarchical, and the two leading republican governments have the public health organization subordinated to some other department of the government, just as it is in the United States at present.

To be perfectly frank, it is not apparent to us just wherein a department would have any higher coefficient of efficiency than a bureau. A department would have no more power to enter a State than a bureau has; could do no more to prevent the introduction of epidemic disease from abroad than a bureau can; could do no more to control or eradicate epidemic disease once it gets established in the country than a bureau can; could institute no new line of research that a bureau can't; could command no better administrative ability than a bureau can. In a word, a department could have no more authority, no higher scientific attainments, and no better administrative ability than a bureau, and

"All the rest is leather or prunella."

One of the arguments that have been advanced in favor of a department is it ought to be a model for the State public health departments. What States, pray? Certainly not those that already have efficient organizations, for they need no models. They are capable of



discerning their own needs without having a pattern made for them in Washington. They would not modify their own organizations to conform to a Federal pattern. And this by the way includes a great majority of the States at the present time. Public sanitation is developing rapidly in all parts of the country—as rapidly as local conditions will allow, and a department in Washington, even if it were better than a bureau, would not advance the cause.

It would rather seem presumptuous on the part of the Federal government to create a department for a reason of that kind, for it would seem to imply that the States are not capable of self-government, and while that may be true, it would not be nice for the Federal government to say so.

If the advocates of the measure feel that they need a model for their own particular States, there are plenty of State organizations that would serve as excellent models, better in fact, than a Federal department would serve for a State model.

For these and other reasons, we repeat that we fail to see the advantages to be derived from a department over a bureau, even sufficient to offset the disadvantages of multiplying cabinet offices, tearing down an efficient bureau of public health, and erecting in its stead a more elaborate, untried, and possibly top-heavy scheme. The better plan would be for congress to enlarge the functions of the bureau, as the needs of the service demand. This would do all that can be done for the public health, and would have all the advantages of the department, without the fuss and feathers.

### SOME FAULTY NOTIONS

If there is one thing more than another which the State Board of Health of Florida has tried to impress upon the people of the State, it is practical methods in connection with sanitary management or supervision. And by practical methods is meant doing those things for the betterment of individual or communal health, which can be understood, for which there is a good and sensible reason for acting, and which experience and tried-out knowledge support the way of teaching.

Theories oftentimes are pleasing and engaging, but never convincing, and to accomplish the greatest good, confidence must be inspired for what is taught, and speculation should be shunned.

If people when talking about "this or that," as being "unsanitary," will just stop for a minute and consider what "sanitary" means, and

then seriously ask themselves if what they are calling "unsanitary" is really detrimental to health, and will, or can cause disease, sensible deduction and sober reason will soon take the place of vague speculation, and there will be less impracticable suggestions and ideas expressed.

When we hear people say, "Beware of the night air," "it is dangerous to health," and "if you breathe the night air in malarial sections you are sure to contract malaria," what do they really mean? Why should not people breathe at night as well as in the daytime, and can anybody live without breathing at night, some kind of air, and is not all air we take in our lungs at night, night air? Yet, this advice is most commonly given to newcomers in certain sections where land is low, marshes exist, and the general topography is one that is usually called "malarial." And it is on this kind of advice which many have accepted, and which, unfortunately, our own medical profession has not been blameless in promulgating, individuals are found who shut up their bedrooms to keep out the night air, unconsciously vitiating what little blood oxydizing material is left in the atmosphere of the sleeping apartment. It takes but a little mathematical calculation to figure out the length of time it will take a sleeper to use up the life producing quality of air in a closed sleeping room of ordinary dimensions, for according to physiology a person sleeping naturally will breathe about 18 to 20 times a minute, and with each inspiration and expiration will take in and give out about thirty cubic inches of air, and of the expired air about 4.3 per cent is carbon dioxide. It is the carbon dioxide which is injurious, for an atmosphere breathed more than twice is calculated to bring about distressing feelings of drowsiness, headache and mental dullness, and if carried to its fullest saturation, stupor and death. To shut out night air, therefore, on the supposition that it is harmful is another one of the false ideas connected with health preservation or disease prevention. Please don't forget this fact; that the Plasmodium of Laverans, the malarial parasite, is not breathed in, but is injected by a mosquito, which has been previously infected. I say, please don't forget this fact, for it is a fact, but please at the same time, do forget about the old and one-time notion of "malarial air," and open your windows both winter and summer, thus giving nature a chance with fresh air to invigorate you while you sleep.

### ODORS

Almost daily complaints come to the office of the State Board of Health, and requests at the same time asking for an abatement of



foul odors, or removal of dead animals, sometimes within municipal lines, but more often outside of incorporated towns and settlements. A horse has died along the roadway—fallen dead perhaps from lack of food—and the owner has unhitched and left the animal to the buzzards and natural elements to disintegrate and destroy. A nearby neighbor says the odor of putrefaction will create sickness and wants the carcass removed or buried, writes to the Board some hundreds of miles away from the scene, to "send some one at once." In fact, "come a running," to remove the nuisance. It is an old-time notion that things rotting—animal or vegetable—will produce sickness of some kind. The dead animal is certainly a nuisance to comfort and to the nostrils, but not to health. A decomposing animal, even a human which in the process of putrefaction gives off more nauseous and sickening odors than all other animals, will not cause a disease. An animal in the process of decay can not cause smallpox, nor measles, scarlet fever, typhoid fever, malarial fever, plague or cholera, because each of these diseases has a specific organism of its own to produce or reproduce its kind. What sickness, then, can it cause? An animal, human or brute, not infected, is as harmless to public health while in the rotting process, as would be the separation into the natural elements of air and vapor of an ant or a humming bird. Therefore, we must conclude that "bad smells" are not disease-producing agencies, although they may be disgusting and nauseating to refined sensibilities.

#### WEEDS

Nearly every city council when it first organizes, especially if it is a "newly incorporated" settlement, "runs counter" to a proposition which in the absence of something better to be suggested for the improvement and conservation of the health of the "dear people" proves to be a bone of contention and dispute later on. "The weeds should be cut," says one member, "they are injurious to health." Another who has been reading the HEALTH NOTES, asks "Why?" "What sickness will weeds produce?" "Well I have always heard weeds keep the sun from the earth and promote dampness, and in tropical climate dampness is injurious to individual health." Now let us reason together, the NOTES and the reader: What or why should weeds be objectionable from a public health standpoint? In what particular do weeds differ from any other luxuriant vegetation? How are weeds more objectionable to health than roses or morning glories or honey-

suckle? That is, as affecting the health, by causing sickness, or aiding in spreading disease. Of course it is conceded that flowering plants are more pleasing to the eye, and agreeable to the nostrils, but as vegetable products coming from the soil, it is not granted that a profusion of growth of one is to be approved of, and a rankness of growth of the other condemned unless the name has something to do with the contention. The name "weed" carries with it an opprobrium that suggests or indicates something worthless and disgusting, but is that altogether true? Many shrubs which in their profusion may resemble weeds are valuable in the medicinal line, such as the jimson weed, deadly nightshade, foxglove, belladonna, digitalis, and not the least, the rag weed, which lately is said to have valuable medicinal qualities as a remedy for hay fever.

Too often municipal authorities confuse unsightliness and disorder with disease producing agents. Indifference and sloth are really not factors of disease or spreaders of disease, although such conditions are humiliating to public-spirited citizens. Generally the initial step in the municipal sanitation instituted by a new committee in the city council is to tackle the weed question, greatly to the annoyance and temper of the owners of vacant lots.

We do not dispute the argument that a nicely-kept grass lawn is more sightly and pleasing and conveys to visitors the idea of a progressive public spirit on the part of the citizens of a place, city or hamlet, than a rank growth of vegetation, but we do contend that such rank growth per se has nothing in the world to do with the health or sickness of a community or individual.

Yes, plant grass and cultivate a lawn in place of unsightly vegetation, but do it because of municipal pride and not on the ground of health demands. Growing weeds or cut weeds or dying weeds will not create sickness of any kind. Weeds of themselves are harmless. Energy directed against weeds is misdirected and is an impracticable and faulty notion of sanitary requirements.

#### THE COMMON DRINKING CUP

When some one says, it does not matter whether layman or professional man, that the common drinking cup is a prolific source of disease dissemination; the question naturally follows, "How do you know?" What is your proof, and what diseases are thus transmitted from person to person? Simmered and chased down to proof, there is none. Speculation and conjecture and "it ought to be if it isn't,"



are vague, indefinite and untrustworthy. For people to use a vessel after one another without washing the cup or glass is uncleanly and only in this way can it be said such a practice would be unsanitary, for on general principles cleanliness and sanitation are synonymous terms. Hotels, boarding houses or even private homes do not destroy every vessel after it has been once used. Cups and glasses and plates are used over and over again after being washed every day and perhaps several times during each meal if the supply is short.

We do not know that there are any health officers or sanitarians who would advocate the destruction of vessels after once being used. If the common drinking cup is rinsed or washed out before using, wherein is it different from the cup or glass cleansed each time it is used in a hotel or boarding house? The NOTES has always thought that the common drinking cup has been a much abused and vilified member of society. By insisting upon abandoning or doing away with the common drinking cup and the vague indefinite reasons given for the advice, people lose confidence in their sanitary teachers. Why? Because it is advice impossible of universal acceptance and impracticable to execute.

Some little time ago the State Health Officer of Florida wrote to the Secretary of the National Society for the Study and Prevention of Tuberculosis and asked if there was a single case on record or if it is known to the association that the use of the common drinking cup or the drinking of one person after another had been the means of spreading tuberculosis; this is what Dr. Farrand writes:

NEW YORK CITY, October 28, 1909.

*Dr. Joseph Y. Porter, State Board of Health, Jacksonville, Fla.*

MY DEAR DOCTOR PORTER—I have your letter of October 25th. I am sorry to say that I can not give you any definite information on the particular point about which you inquire. I am like, I think, most others, very skeptical as to the communicability, to any marked degree, of tuberculosis through drinking cups or glasses. That such communication is possible is, of course, true, but I fancy the amount of infection through that agency is very slight. Definite proofs to this effect, however, I can not give, nor do I know of any literature bearing particularly on it. I will take up the point with some of our pathologists and ask if there is any recent work along that line. I have long felt that the campaign against the promiscuous use of drinking cups, etc., should not be based on tuberculosis considerations but rather on the known communicability of syphilis, and other acutely infectious diseases.

There is a possibility of syphilitic infection being conveyed from the mucous patches in the mouth of a syphilis individual to another individual with aphthous sores by using a glass or cup without being

washed or rinsed as Dr. Farrand suggests, but the danger is so exceeding slight that it is to our mind hardly worth considering other than in the light of cleanliness, which factor State Boards of Health should esteem it their special functions to teach. I have yet to see a single person of cleanly habits who will use a glass or cup, even among the members of the same family, unless it is cleaned or rinsed.

The various devices designed by several enterprising commercial firms for furnishing individual cups or drinking vessels are to be commended and encouraged because of the teaching in personal habits of cleanliness which such an education furnishes and besides are comfort-giving conveniences to be had at a slight cost to the individual user. When people learn to be cleanly in their habits—and it is the privilege and likewise the duty of Health organizations to teach this principle—it will not be needful, nor will it be required to pass rules and regulations to enforce the practice. Nor can it be assumed that the law will ever be able to compel personal cleanly habits for “this kind only comes” by training and persistent instruction by example.

#### KISSING

Some years ago the impracticable instructor in sanitary matters had hideous visions of the danger lurking in a kiss, and immediately the followers of new whims and isms, in this line, raised a cry to High Heaven that kissing should be prevented by statutory enactment and that even the “holy kiss” commended by saints should be stopped. Ridicule—the most potent weapon known in these times—by press and magazine writers soon put in the shade a vagary which had so little to support it as a health demand, and so absurd in its expectations. Right here again, comes in the principle of cleanliness. The man who has permitted himself to be infected with a disgusting disease, the manifestation later on showing itself in infectious ulcers in his mouth, is not a clean person and he knows it. Therefore he should be imbued with a spirit which would prevent him from conveying the poison of his mouth or lips to that of an innocent girl. If this quality of manhood is not in him, there is no law that has yet been placed on statute books which would prevent the injury should he be debased enough to inflict it.

Let syphilitic and tuberculous—pulmonary—people be taught that they are likely to do incalculable injury to friends by kissing on the mouth, but a war waged against kissing is a proposition which under lawful uses and loving motives will meet with defeat to whomsoever



has the temerity to suggest it. Let State Boards of Health, therefore, confine their teaching, instruction and recommendations to practical methods of sanitary management, and not attempt to engage in theoretical agitations which are untried and unproven.

### THANK YOU!

While the State Health Officer receives many letters each month which narrate and attest the great interest manifested in the conservation of the public health, yet the following is of more than usual interest and is so valuable that it deserves a place in the publications of the State Board of Health. The name of the physician, his town and county, are omitted for obvious reasons.

*Dr. Joseph Y. Porter, Jacksonville, Fla.*

DEAR SIR—I will write you a few lines and let you know that we have not given up our fight against the hookworm. We neglected the indigent cases for a while during the winter and tried to push the work among the pay patients.

I was very much disappointed at your inability to let your assistant stay with us longer but hope you will remember our county when you start out again.

I find that the work is not without its drawbacks. Many cases leave me and go to other doctors after taking one or two treatments and as their belly has been rid of a part of its pest, of course, they get better and they give the other fellow credit for it, holding me up as a fake to all his neighbors.

But among all the dark clouds there are a few shining stars. I have within the last year seen two girls who were doomed to die with tuberculosis by their family doctor, and had suffered the mental torture of that horrible death for two years, come out and bloom like a June rose under the influence of a few doses of thymol and salts, and to add to the pleasure, I saw one of them only a few days ago a happy bride with the picture of health on her face. Now, while our compensation is very poor in these cases, I get more real pleasure out of doing the work than any other, so you can depend on me for one doing his best.

We have one case of smallpox with us at this time, but as our vaccination was almost complete last winter, and caring but very little about those who would not respond to our call, I have made only a feeble effort at any isolation this time.

Yours very truly, etc.

The prevalence of smallpox in the spring prevented a continuation of the campaign against hookworm disease in this doctor's county. As soon as vaccination had been generally done, smallpox decreased, but a few cases have occurred since among those who would not be vaccinated—the anti-vaccinationists.

Just as smallpox ended its visit in that county, the adjoining county began to report many cases. Another epidemic was on hand to man-

age, and the fight against hookworm disease was left to local physicians to conduct.

Another letter, appended hereto, relates other features of the hookworm work:

*Joseph Y. Porter, M. D., Jacksonville, Fla.*

DEAR DOCTOR—Enclosed you will find case records of eleven cases of uncinariasis, six of which are entirely well, the other five being apparently well. (Cannot get further specimens for examination.)

I try to handle these people with gloves, give them all the literature I can get together on the subject, but I am sorry to say that a great many are unable to "see the light." I am conducting quite a little campaign on hookworm disease, not for the money there is in it—for there is no money in it—but for the sake of humanity and future generations. It's a thankless job, most certainly in the majority of cases, on account of lack of education. I am located in a neck of woods where superstition, ignorance and religious fanaticism prevail. A large percentage of the people can neither read nor write and are proud of it apparently. I have slipped in one treatment on about 200 people, white and black, without their knowing what the treatment was for, and the results from a health standpoint have been very gratifying.

I have also put the "fear of God" in the hearts of everybody I come in contact with as regards "ground itch," teaching them the prophylactic treatment, associating said ground itch with hookworm disease with those whose intelligence would warrant it; with others associating it with such symptoms as they wish to avoid a repetition of.

I could distribute a good many copies of the publication of October, 1910, on hookworm disease, to good advantage, if I had them.

Sincerely, etc.

These doctors are to be congratulated on their sincere and constant efforts to better the conditions existing in their respective towns and counties, and the State Board of Health gives them every cooperation possible.

These instances are from every-day life; they not only illustrate what is or may be experienced in a campaign against hookworm disease, but possibly if others think over these experiences they will be a guide in handling similar situations in other parts of the State.

The physicians of the State, as well as the citizens in general, should remember in requesting containers for specimens to any of the laboratories, or in asking for vaccine, that their requests should be addressed to the Jacksonville office of the Board.

The Central Laboratory at Jacksonville distributes containers throughout the State, upon request of physicians, and the containers are furnished with proper labels so that the work is divided in proper proportion among the laboratories.



## SANITARY LEGISLATION IN FLORIDA

It is pleasing to state that the interest in sanitary matters has so increased in the State during the past few years that of the measures relating to sanitary matters introduced during the 1911 Legislature and enacted into law, the only one urged by the State Board of Health and presented to the Legislature by a resolution of the Board when in annual session, was that providing for a Sanitary Engineer. The other measures—three—were the conception of the Governor and of the Legislature.

### HOSPITAL FOR INDIGENT CRIPPLED CHILDREN

CHAPTER 6133 (No. 14).

AN ACT TO AUTHORIZE AND DIRECT THE STATE BOARD OF HEALTH TO ESTABLISH A HOSPITAL FOR THE TREATMENT OF INDIGENT CRIPPLED CHILDREN, AND PROVIDING AN APPROPRIATION THEREFOR.

*Be it Enacted by the Legislature of the State of Florida:*

SECTION 1. That the State Board of Health be, and it is hereby authorized and directed to establish at some suitable and convenient location in this State a Hospital for the treatment of indigent crippled children of this State. In such hospital indigent crippled children of this State shall be received and treated free of charge.

SEC. 2. That for the purpose of Section 1 hereof the State Board of Health is hereby authorized to purchase a plot of ground and erect thereon a building suitable for such purpose, or to purchase a plot of ground with building already erected, in its discretion. For such purchase and for the purchase of suitable instruments, apparatus, furniture, fixtures and other articles necessary for such an institution, the sum of twenty thousand dollars, or so much thereof as may be found necessary, is hereby appropriated, payable from the State Board of Health Fund.

SEC. 3. That for the purpose of maintaining the hospital herein provided for, and of employing such physicians and attendants as are requisite for the conduct of the hospital, the sum of ten thousand dollars, or so much thereof as may be necessary, is hereby appropriated annually for the two years beginning July 1st, 1911, payable from the State Board of Health Fund. Provided, that until the number of indigent crippled children, citizens of the State of Florida, shall be sufficient in number to warrant the State Board of Health to erect and maintain an institution of this character and nature, that the State Board of Health is authorized to arrange with any sanitarium or hospital in Florida to care for and treat the indigent crippled and deformed children of the State and to pay for such treatment out of the funds of the State Board of Health, not in excess of the amount appropriated by this Act.

SEC. 4. This Act shall take effect July 1, 1911.

Approved May 30, 1911.

## SANITARY ENGINEER

CHAPTER 6166 (No. 47).

AN ACT TO AUTHORIZE THE STATE BOARD OF HEALTH OF FLORIDA TO EMPLOY A SANITARY ENGINEER WHENEVER THE SAID BOARD MAY CONSIDER THE NECESSITIES OF SANITATION IN AND ABOUT THE STATE MAY SO REQUIRE AND TO FURTHER PROVIDE FOR HIS COMPENSATION.

*Be it Enacted by the Legislature of the State of Florida:*

SECTION 1. That the State Board of Health of Florida be and is hereby authorized to employ or engage the services of a Sanitary Engineer, whose expert knowledge in the subject shall be determined by the State Health Officer, whenever in the opinion of the State Health Officer the necessities of sanitation in and about the State may require an expert opinion and decision in regard to construction of sewers, drainage of a sanitary character, the disposal of sewage and domestic wastes, or the institution of potable water supply for any of the cities or towns of the State of Florida.

SEC. 2. That the Sanitary Engineer, as provided for by Section 1 of this Act, shall only be employed at such times and such periods as in the judgment of the State Health Officer his expert services may be required.

SEC. 3. That the compensation for services of the Sanitary Engineer provided for in Sections 1 and 2 of this Act shall be fixed by the State Health Officer with the approval of the President of the State Board of Health.

SEC. 4. That all laws or parts of laws in conflict with any of the provisions of this Act are hereby repealed.

SEC. 5. That this Act shall take effect on the approval by the Governor.

Approved May 8, 1911.

### SCREENING HOTELS, BOARDING HOUSES AND RESTAURANTS

CHAPTER 6195 (No. 76).

AN ACT MAKING IT A MISDEMEANOR FOR ANY PERSON OR PERSONS TO OPERATE ANY HOTEL, BOARDING HOUSE OR RESTAURANT WITHIN THIS STATE WITHOUT KEEPING ALL DOORS, WINDOWS AND OTHER SIMILAR OPENINGS IN DINING ROOMS, KITCHEN AND PASSAGEWAYS BETWEEN SAME SCREENED, AND FIXING A PENALTY FOR FAILURE TO COMPLY WITH THE PROVISIONS OF THIS ACT.

*Be it Enacted by the Legislature of the State of Florida:*

SECTION 1. On and after the passage of this Act it shall be unlawful for any person or persons to operate any hotel, boarding house or restaurant within this State without keeping all doors, windows and other similar openings to dining rooms, kitchens and passage ways between same securely screened with screen wire not coarser than 12 mesh to the inch.

SEC. 2. Any person or persons found guilty of violating the provisions of this Act shall be deemed guilty of a misdemeanor and upon conviction fined not exceeding fifty dollars. Each day's business conducted in violation of the provisions of this Act shall constitute a separate offense.

Approved May 30, 1911.

### HOG CHOLERA SERUM

CHAPTER 6167 (No. 48).

AN ACT TO ESTABLISH, MAINTAIN AND OPERATE A HOG CHOLERA SERUM PLANT, TO AUTHORIZE THE STATE BOARD OF HEALTH TO MAKE RULES FOR THE PROTECTION AND DISTRIBUTION OF SAID SERUM.

*Be it Enacted by the Legislature of the State of Florida:*

SECTION 1. The State Board of Health is hereby authorized and empowered to establish, maintain and operate a plant for the protection and distribution of Hog Cholera Serum for the purpose of distribution to the farmers of this State upon application therefor.

No cost shall be charged by the State Board of Health for the Hog Cholera Serum so distributed.

SEC. 2. This Act shall go into effect upon its passage and approval by the Governor, or upon its becoming a law without his approval.

Approved June 3, 1911.

The difference between varioloid and smallpox is about the same as the difference between a kleptomaniac and a common thief—purely a social difference.

Two things that everybody ought to know by this time:

That the civil war is over and  
That vaccination prevents smallpox.

The idea of slaughtering poor little typhoid flies! A Miami mother recently said to her small son who was snapping flies to death with a piece of rubber: "Son, don't kill the little things. They are God's flies." And in a minute she heard him murmur as he swatted another to its long home: "God's fly—go to God."—*Miami Metropolis.*

FLORIDA



# Health Notes

OFFICIAL BULLETIN

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No. 9 (New Series)

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Sent to any address in the State for the asking.

If you receive it without asking, it means that someone else has requested it for you.

When you change your address drop us a card.

When giving change of address, give both the old and the new.

Anything you want to know about the public health we will try to tell you.

Any information you want about communicable diseases of domestic animals we will help you to get.

Address communications to Jacksonville, Fla.

*Forbear not sowing because of birds.*—From "Outlandish Proverbs."



### "THOU SHALT NOT BEAR FALSE WITNESS AGAINST THY NEIGHBOR"

There is a certain element in Florida—small, it is true, we are happy to say, and with but feeble following—who persistently delight in misrepresenting what the State Health Officer has said or has written. They would make it appear that the State Health Officer is now trying by every means in his power to force by law the citizens of Florida to be vaccinated, whether they want to be or not. Such statements, whether written or spoken, are deliberate untruths and the writers and idle talkers know they are falsifying when they circulate such statements, because there are printed records to prove the contrary.

It is true that in the early days of the State Board of Health the State Health Officer did seek to convince the legislature that in compulsory vaccination the most economical management of smallpox could alone be found. He gave facts, figures and proofs to substantiate his statements and prove his assertions.

The legislatures have seen the matter differently and were seemingly content to waste thousands and thousands of the tax-payers' money to nurture a disease occurring principally among a class who contribute little or nothing to the intelligence of the State but have always been a source of great expense in criminal management. As the people of this commonwealth apparently agreed to and approved of this policy (for their representatives repeatedly affirmed the same), the State Health Officer has confined his administration of smallpox to the strict letter of the statute and has abandoned any further attempt to effect a scientific, rational and economical management, but has nevertheless given time and effort to practical teaching by repeated citation of incidents and circumstances which undoubtedly bear out his contention.

"A *truth half told* is worse than a—" (let's say falsehood, for its synonym is too harsh to be spoken in decent society), because in a truth half told there is a malicious attempt to conceal certain facts upon which convincing conclusions are drawn and based, and because, further, there is an evident desire to distort—as in this instance—a preferred advice into a command or recommendation for a legal enactment. The State Health Officer of Florida has always had the courage of his convictions and the manhood to assert them, irrespective of whether they were followed or coincided with the wishes or opinions of any who are opposed to his advice. He has the consciousness of having dealt honestly and squarely with the people of Florida. Can his critics say as much?

What he believes to be for the best interests of the health of the citizens of this State he will continue to advise and recommend, regardless of what the "know-alls" may think, write or say. And when the Board and the intelligent people of the State want him to resign, a mere hint from the Board of lack of confidence in his honesty and integrity of purpose and teaching will find the position at their disposal to another. There are some people who stubbornly shut their eyes to the truth and close their ears to all argument and reason. It is useless to try to convince such people of anything that is sensible or enlightened.

### VAPORINGS

To any sensible and rational individual it must seem to be the height of silly childish twaddle and asinine stupidity for any one, because of their own careless indifference, prejudice or ignorance, to lay the blame of contracting a preventable disease on another. It might as well be said that the health authorities of a city or State are responsible should a person shoot the end of his finger off, or wound his hand, because carelessly placing the member over the muzzle of a gun and then intentionally or accidentally releasing the trigger; or that a fire department is responsible for an extensive conflagration, as to charge the health authorities for a person contracting smallpox. In the first place, if the customary caution is followed, no accident ever occurs, and in the second place, if the advice of those competent to give it is heeded, smallpox is an unknown disease.

### WASTEFUL

It was Dr. Hegg, the State Health Officer of the State of Washington, we think, who very sagely remarked that it was a criminal waste of the people's money to maintain hospitals for the care of smallpox patients. If we have quoted Dr. Hegg incorrectly, we apologize, and are perfectly willing to take all responsibility for saying the same thing and having the same opinion. It is wrong and it is a crime to spend money to nurse up and keep going a disease which can be prevented from occurring in the first place. If there was a known way to prevent conflagrations it would be held to be a malfeasance in office for city governments to maintain fire apparatus and costly methods of arresting fires. The press would rise up in all the indignation of their powerful voice and pen to protest against a sinful squandering of the tax-payer's money. Why? Because it could be pointed out that with such and



such done there would be absolutely no cause for fear from incendiarism or from accidental burnings. Even with expensive means provided for fighting fires, city governments enjoin caution in constructing buildings by enacting ordinances which provide a certain class of material and non-inflammable roofs.

Whenever and wherever the pockets of men are likely to be touched and the commercial life imperilled, it will be found that the majority are not only willing but eager to take advantage of any and every measure which will save a dollar or protect an industry, yet, when their own lives and health are at stake, all sorts of chances are taken and men and women will give a listening ear to those who would belittle efforts to spare them pain, disfigurement, discomfort and perhaps death.

### QUARANTINE IN THE MANAGEMENT OF SMALLPOX

SMALLPOX CANNOT BE CONTROLLED BY QUARANTINE, because  
ALL CASES CANNOT BE QUARANTINED.

ALL CASES CANNOT BE QUARANTINED, because  
ALL CASES ARE NOT REPORTED.

ALL CASES ARE NOT REPORTED, because  
ALL CASES ARE NOT RECOGNIZED.

ALL CASES ARE NOT RECOGNIZED, because.  
THE DISEASE IS SO MILD IN FLORIDA.

To illustrate how very mild it usually is in this State: last year we had approximately 2,500 cases and only thirteen deaths. There were 1,300 cases reported, but only about one-half the cases were reported till after they were well. Many cases about Tallahassee and in Leon county, and in Jefferson county, and Escambia county, and elsewhere were found after they had recovered, but not before.

The disease is usually so mild in Florida that only about twenty per cent. of the cases leave any permanent marks.

It is milder than measles, scarlet fever, whooping cough, or diphtheria.

It causes fewer deaths than any of these diseases. It is frequently so mild that when the doctor calls it smallpox the people give him the horse laugh. Many cases have fewer than a dozen pustules. Many cases never stop work a day from it. They are sick a day or two with fever and think they have malaria and take a dose of quinine, and then after about forty-eight hours they feel better and go about their business. They may observe a few macules that they attribute to mosquito bites. They pay little attention to them. The macules may get larger or they

may abort and cause very little inconvenience, and SUCH CASES ARE COMMON.

### SUCH IS SMALLPOX IN FLORIDA.

The greater half of the cases never call a doctor. And when they do call one it is during the day of the fever before the eruption appears, and he never sees the patient again, for they report better next day and that ends the professional side of it.

Or if the doctor sees the eruption he is thrown off his guard by its very mildness. The cases he has read about are entirely different from this. Most doctors only see a few cases of smallpox during their entire professional career. It is no reflection that they fail to see smallpox in such benign eruptions. Indeed, doctors of wide experience are not always able to say definitely whether a given case is smallpox.

And herein lies the difficulty. IT IS THE VERY MILDNESS OF THE DISEASE THAT MAKES IT IMPOSSIBLE TO CONTROL IT BY QUARANTINE.

To give some definite instances illustrating the above, I was called to DeFuniak Springs a few weeks ago to see some eruptive trouble in the family of a prominent citizen of that place. I AM UNABLE TO SAY TO THIS GOOD DAY WHETHER THAT WAS SMALLPOX. It may have been or it may not. I incline a little to the belief that it was. But that is by no means definite. It is not for lack of experience with the disease, for it has fallen to my lot to treat during the last eight years some fourteen hundred cases. But that the line is so poorly defined between the smallpox and not-smallpox, that no amount of experience will enable one to always arrive at a clear unquestioned conclusion.

Again: It has not been a great while since a certain physician of Jacksonville reported a case of smallpox near the union station. We had no smallpox in town at that time. I went to see the case with the physician. I told the patient frankly that I did not know. He elected to take hospital treatment. After a period of about seventeen days he was dismissed, and I am unable to say to this time whether he had smallpox.

Again: A soliciting agent for one of the railroads in Florida, developed an eruption over in Riverside. He was taken to the hospital and remained there some three weeks. And he is another that will never know whether he had smallpox.

Dr. Young has had a liberal experience with the disease. So have the local physicians in Ocala. Two years ago the local physicians were in doubt and sent to the State Board. Dr. Young was detailed



to Ocala. He was still in doubt. I went, and I was no more able to clear the doubt than he or they. And what is more, there were several cases, but not one that would enable us to make a clean-cut decision.

Instance after instance like the above could be related till they would amount up to hundreds.

Now, if a physician whose business is to look after smallpox, and who has had a liberal experience with the disease, is not able to say in all cases whether it is or is not, how much less should be expected from one who sees only a few cases incidentally in his life? And if the physician of experience fails, what about the laymen who has never seen a case, likely as not? And then what about the negro?

I have pointed out that these mild cases are not sick. Many of them never go to bed with the disease. Many of them never lose a day's work. But the most important thing is that FEW OF THEM CALL A DOCTOR. If they did there would be fewer, but still many, unrecognized cases.

Now what control can be exercised over a case that we know nothing about? And yet these UNRECOGNIZED CASES spread the disease.

NOW, WILL SOME ONE PLEASE SHOW US THE WAY OUT?—a remedy that will work. It is easy to say quarantine all cases and that will control the disease. It would. But how is it to be done? What is needed is some method by which these unrecognized cases can be recognized, found and reported, for you must "first catch your rabbit."

One man said make all eruptive diseases reportable. So far so good. But the public will not stand for the quarantine of chickenpox. And when the doctor thinks it is chickenpox, that is the end of the law.

Besides that would only provide for those cases that have a doctor. What about those that don't call a doctor? Will some one please show us the way out?

Again: If we had a disease that could be recognized in all cases we would still have an insurmountable difficulty in this: That people PURPOSELY AND MALICIOUSLY conceal smallpox. The motives for this are not always clear. Some conceal it because they don't want to be quarantined, hence THE MORE RIGIDLY IT IS QUARANTINED THE MORE IT IS CONCEALED. I have found it hiding under the mattress, between the springs and mattress. I have found it up in the loft. I have seen cases hide out for days at a time. In 1904, at what is called the Ronalds place, some four miles north of Tallahassee, was a family of some nine or ten. They all had smallpox

except the old man. (He had been vaccinated and the others had not). I saw them daily for a period of some three or four weeks. Finally one of the neighbors developed it and said she thought she got it from "Jennie." Who was Jennie? I was told that Jennie was one of the family I had been treating. I had never seen Jennie. I went back and told them I wanted to see Jennie. They called her up out of the swamp close by. She was about well at the time. She had had a severe case. She had evaded me all during the time so that I was never aware of her existence till one of the neighbors developed the disease. And Jennie had been visiting round the neighborhood from the time she was able.

Laws might be made to punish such offenders, but the damage is already done. Punishing them after will not recall the infection that they may have spread.

DON'T ALL SPEAK AT ONCE, BUT WILL SOME ONE PLEASE SHOW US THE WAY OUT?

Under an act of the recent legislature the State Board of Health is now authorized to vaccinate hogs against cholera. The disease appeared a few days ago at Waldo, whereupon the veterinarian of the State Board of Health was detailed down there. He vaccinated some sixty head. Every knock against vaccination is a boost. Every year sees its usefulness extended. This is a long step in the right direction. It will save the farmers of the State many thousand dollars a year in the lives of their hogs. The time isn't far distant when every man who knows enough to raise a hog will know enough to get it vaccinated. Exception will only be made to those not worth saving.

### PLEASE HEED

The State Board of Health is always pleased to hear from its friends on matters relating to State medicine—sanitary subjects—but correspondents should bear in mind that if a reply to their letters is expected or desired, addresses should be given; particularly is this the case with traveling men, who change their abodes almost daily. Quite recently the State Health Officer was written to from a point on the lower East Coast on a matter in which one of the State statutes was being or had been violated: no less a commission of a misdemeanor: reporting that yellow fever existed in another part of the State. If the writer will give the State Health Officer more definite information in regard to this malicious slander, steps will be taken to land the traducer of Florida's good health in one of the State's turpentine farms.



Idle gossipers will find it unwholesome to indulge in small talk of this kind.

The office has also received an anonymous communication from some one in Ocala complaining about the Board not giving attention to the kind of corn that is being sold in the State. If he will kindly let us know who he is we will be pleased to answer him.

### DISEASE OF PINES

It is the function of the State Board of Health to deal with disease. It doesn't matter whether that disease be among human beings or lower animals—it is disease, and in order to understand the fundamental principles of disease, it must be studied throughout the organic world; not only the diseases of human beings, but of lower animals, of plants, of the lower orders of plants. Indeed, a great part of the study of human disease is the study of the lower forms of plant life.

It is not going far afield, then, to have a word to say about an important disease among our Florida pines. The U. S. Bureau of Entomology has issued a bulletin on this disease, and quite recently a circular of instruction concerning it. It ought to be of special interest to timber men. The circular is reproduced below in full:

United States Department of Agriculture, Bureau of Entomology,  
Washington, D. C.

### PATCHES OF DYING TIMBER A MENACE TO THE HEALTHY TREES

Investigations have shown that a patch of dying pine anywhere in the Southern States is a menace to the healthy pine within a radius of three or four miles. The broods of the southern pine beetle developing in the bark of the trees of one such center of infestation may swarm in any direction and settle in the healthy timber. Thus other large patches are killed until nearly all of the large as well as the small pine over extensive areas is dead.

When these centers of infestation are numerous within the area of a county or even a large section of territory, they can only be compared with the starting of so many forest fires and, as has been demonstrated, they may lead to far greater destruction of merchantable pine than has ever been recorded as resulting from fire or from storm in the Southern States.

#### REQUIREMENTS FOR SUCCESS IN PROTECTING HEALTHY PINE.

The essential requirements for success in the protection of the healthy pine are:

*First:* General information regarding the habits of the beetle and a knowledge of the methods of control.

*Second:* *Unity of action among owners of pine* in strictly adhering to the essential details of authoritative advice. No one owner can insure the protection of his timber so long as there is a neglected patch of infestation within a radius of two or three miles.

#### THE MORE IMPORTANT EVIDENCES AND FACTS.

1. If in clumps or patches of pine where there is no plain evidence of serious injury by fire, the foliage fades to pale green and changes to yellowish and pale brown, it indicates that the trees are dying from the attack of the southern pine beetle, and that the bark on such trees is infested with the developing broods of minute white grubs and transforming beetles. Therefore such trees are a *menace to the living trees*.

2. If the trees have reddish brown and partially fallen foliage or if all of the foliage has fallen, it indicates that the broods of beetles have emerged and that the trees are no longer a menace to the living trees.

3. If the trees die during the period between the first of March and the first of October, they will be abandoned by the broods of beetles within a few weeks after the foliage begins to fade.

4. If the trees begin to die during the period between the first of October and the first of December the broods of beetles will remain in the bark until in March or April. If the trees die during the winter months the broods will remain in the bark until about the first of May.

5. If a pine tree standing among or near a grove or woods of living pine is either struck by lightning or felled and barked or split into cordwood during the summer and early fall, it will, as a rule, attract the beetles within a radius of three or four miles and result in the starting of a new center of infestation and in the death of a large number of trees.

#### ESSENTIAL DETAILS IN RECOMMENDED METHODS OF CONTROL.

There are certain essential details in the recommended methods of combating the southern pine beetle which must be observed in order to avoid not only serious mistakes, but possibly ultimate failure:

a. The principal clumps or patches of dying trees which are actually infested by the broods of the destructive beetle, as indicated by the fading and dying foliage or otherwise, should be located and marked during the months of November, December, January, and February. In order to do this work properly experience or special instruction is required. Therefore, some one who has had instructions



should have charge of the work in each important area in which control work is to be undertaken.

b. The broods of the beetle in the bark of the main trunks of at least 75 per cent. of the infested trees within an area of eight or ten square miles or more must be destroyed before they begin to emerge.

The broods may be destroyed by one or more of the following methods:

1. The removal and burning of the infested bark from the standing trees.
2. The removal and burning of the infested bark from the trees after they have been cut down.
3. The scorching of the infested bark, or the burning of the bark and wood after the trees are cut down.
4. The placing of the infested portions of the trunks in water.
5. The conversion of the infested trees into cordwood and the use of the wood for fuel, or
6. The converting of the infested trees into lumber or other products and the burning of the slabs or bark.

The best time to conduct control operations against the southern pine beetle is during the period between the first of November and the first of March.

Attempts should *not* be made to control the beetle during the months of June, July, August, September, and October, *except under the specific advice and instructions of an authorized expert.*

A. D. HOPKINS,

*In Charge of Forest Insect Investigations.*

Approved:

L. O. HOWARD,

*Chief, Bureau of Entomology.*

July 5, 1911.

To what extent this beetle is operating in Florida I do not know, but I do know that it is here. In 1910 several pines died on a lot next mine in Springfield. I accordingly took the matter up with the Bureau in Washington, and at the request of Mr. Hopkins, in charge of forest insect investigations, sent some of the bark and beetles from the dead trees, when it was definitely determined that this was the cause of the deaths.

The following year a few more trees died, and at my request some of the neighbors took the bark off and burned it. This I am inclined to think had some effect in checking them, since the number that died last year was not so great as the year before.

But out on the Lem Turner road, a mile or more from where these trees died, there is a group of dead and dying pines now. I have taken the pains to determine that they are infested with the beetles, which is the cause of their death.

The State Secretary of Agriculture was written to and asked if anything could be done about it, to which he replied that there was no appropriation or provision for anything of the kind.

For economic reasons we could heartily wish that some provision were made whereby these insect enemies to our fast disappearing pines could be checked.

Now, won't another speak?

### COMPULSORY VACCINATION

There is some opposition to compulsory vaccination as a prerequisite to entering the public schools. Maybe it is well founded. We would not undertake to say. But we do advise people to make careful inquiry and see just what they are going up against when they fail to get vaccinated.

For instance: On or about July 12 Miss X. developed an eruptive disease. She called a doctor. He did not make a diagnosis of smallpox. In a day or two Miss X. felt better, put on a long sleeve to hide her arms, where the eruption was worst, and went to school, went down town, went to church, went to the moving pictures several times, rode on the cars, and did whatever she liked. She continued to do so till she recovered entirely. Then she applied to the State Board of Health for vaccination, when it was discovered that she had had smallpox. This was about July 24th. She was well then, and no further harm could come from it.

How many hundred people had been exposed to Miss X. we have no way of knowing. How many will get the disease we have no way of knowing.

On August third Mr. Y., a brother of Miss X., and living in the same house with her, came down with smallpox. That is the only case we know of so far (August 8th).

I say the only case we know of. There may be a dozen for all we know going about town just as Miss X. did, wondering what the trouble is. Some may turn up after a bit—others may never.

Miss X. had a very mild case. That was what threw the physician off his guard.

It should be understood that Miss X. didn't try to conceal the disease. She tried on the other hand to have it brought to light. Mr. Y.,

who is her brother, as soon as he developed it, went to a physician. The physician did not see smallpox in the benign eruption. Not satisfied, he came to the State Board of Health. It was found that he did have smallpox. He volunteered to go to the isolation hospital where he is now. No attempt on his part to conceal it, or make it out something else. He tried to do the square thing from the first. But in spite of that some hundred people have been exposed.

In spite of the fact that they are above the average for intelligence, and in spite of the fact that they called a doctor, and in spite of the fact that they tried to do the right thing, the disease lurked in the house and in town either in the active or in the incubation stage from about July 2d or 3d (when Miss X. was exposed) to August 3d, and offshots from it may be lurking somewhere in town yet.

Frankly, we see no way of mending matter to intercept incidents of that kind. As soon as it appears on the scene it is taken care of, but what about it during the month that we know nothing of it?

Parents had better make some provision against infections from such hidden sources as that. That is really where the infection comes from anyway. Very few cases are over contracted from cases that we know of—it is only from those that we don't know of. Miss X. wonders where she got it, just as Miss Z. will be soon wondering where she got it.

Later. The baby in the house where Miss X. had smallpox has come down with it. There were six people in the house—three vaccinated and three unvaccinated. Possibly it was one of those obstinate chances that the three unvaccinated all had the disease and the three vaccinated all escaped!

The *Notes* is averse to dabbling into purely medical matters. It is a health pamphlet and speaks only of those matters which relate thereto. Occasionally, however, the *Notes* may be pardoned for deviating from a straight line in this respect and present to its readers some interesting as well as instructive thoughts on allied phases of human living.

*Clinical Medicine* for July has an editorial entitled, "Will Fasting Kill Pathogenic Microbes?" which for good common horse sense and practical ideas is well worth a prominent place in a sanitary journal, for the arguments are applicable to those who pose as leaders and guides in sanitary teaching but fall down in theoretical and visionary absurdities.

#### WILL FASTING KILL PATHOGENIC MICROBES?

A curious controversy is being waged in the columns of *The Critic and Guide*. Upton Sinclair, of *Jungle* fame, declared that syphilis, gonorrhea and malaria could be cured by fasting! Editor Robinson, in denying this assertion, promptly offered to put up \$1,000 against a similar sum, to put the matter to a critical test. Sinclair quite as promptly backed out, thereby demonstrating the depth (?) of his belief in the things he advocates.

All this is trite, the commonplace experience of every American who knows the game of bluff.

However, there is a deeper significance to the seemingly trivial incident mentioned. It indubitably furnishes evidence on the mental status of the laity as regards matters medical, and that deserves some closer consideration.

Let us assume that Mr. Upton Sinclair is not so much his individual self as the representative of the average man of his class—the ordinarily educated and intelligent newspaper man or *litterateur*. He would certainly claim to be that much, and undoubtedly rates himself much higher. He has succeeded in getting into the limelight and has a following. Many may have been impressed by his work and are ready to accept his dicta as possessing a certain measure of authority, or at least as deserving consideration. As such, he ventures into the department of a special calling, a profession held by men of particular education and training, and to these specially instructed men he delivers opinions concerning their affairs, with a force and self-confidence that carry weight with men of his own type as well as the vast masses of less qualified judgment.

Instances are not wanting where men of superlative genius have instructed specialists in the latter's special sphere; as, when Napoleon pointed out to Talma an error in that great actor's conception of a character he had represented. But Napoleons are rare, and Sinclair is not a Bonaparte. Besides, the views of an emperor at whose feet all Europe lies are apt to be accepted as law, if not as gospel.

To the physician, the absurdity of Mr. Sinclair's assertion verges on the grotesque. All three diseases are of parasitic nature, syphilis and malaria being due to animal organisms, and gonorrhea to a coccus. That either could be in any manner affected by fasting is as likely as that *pediculi capitis* could be banished by that means. In fact, Dr. Robinson would do well to propose phthisiasis as a better malady in which to make the test, since the laity could judge of the results more readily than in dealing with micro-organisms demonstrable only by the delicate methods of the biologic laboratory. Such a test surely would prove instructive to the rash Mr. Sinclair, and the easy gradation from a parasite visible to the naked eye to those that require the compound lens for their disclosure might result in an increase of his wisdom—also caution.

In every vocation of man there are to be found amateurs and professionals. Sometimes the former score off the latter; and then there is a howl of delight, for the crowd always sympathizes with its own and delights in going against the exclusive.

Very much more often, though, the amateur falls into error, making mistakes born of his own ignorance of the fundamental things everybody must learn who takes a regular course of instruction—but still the crowd sympathizes with



him, because "he couldn't be expected to know." True, but this self-same amateur should have realized his own ignorance before he proceeded to interfere.

A costly machine may be ruined by an ignorant interferer—and there is little consolation to the owner to be told that the rash one's intentions were good. What piece of machinery is as complicated and delicate as the human body? Nevertheless the rule holds good here.

A Pennsylvanian took his daughter to a quack, who diagnosed "a cancer humor in the blood." To bring out the "humor," he applied a strong solution of corrosive sublimate to her skin. The result needs no description at our hands, but patient as well as quack saw in the angry appearance of the skin the confirmation of the diagnosis. Again the caustic was applied, and it bit deeply into the tissues. A third application followed, and the girl died in the torments of the inferno, slowly burned to the bone.

At the trial the pretender to medical skill swore he really believed the destruction was the cancer humor coming out, and that he did not know the effects of the caustic he was applying; on which plea he was acquitted. The judge ruled that it was the father's duty to satisfy himself of a doctor's qualifications before entrusting his child to him; and that, when so accepted, if the doctor did his best so far as his knowledge and skill went, no more could be expected. The deception due to his claim of skill he did not possess seemed to be out of consideration.

This shocking catastrophe is by no means a solitary example of its kind; every community could furnish others, some quite as bad or worse.

There was that case of the man with the ankylosed knees. The doctors had refused to make any attempt to straighten the crooked legs, but there was in the vicinity one of those "natural geniuses" to whom such matters "come easily," and this fellow undertook to accomplish the cure. Finding the victim's limbs resisting his utmost strength, the man applied his homely, every-day common sense to the problem in a way that commended itself to all present. He had the barn-door taken off its hinges and brought to the sick room, laid the patient on the floor, put the door on top of him, and the "doctor," with two others, got on the door and "tramped!" Yes, and they actually straightened the crooked legs, so that three days later the man fitted into an ordinary-shaped coffin without any difficulty whatever.

Of a piece with this was an incident related not long ago in a drug journal. A woman applied for treatment, saying her child had swallowed some foreign body. The clerk replied that he did not know what to recommend, and she turned to leave; when another clerk, who, the journal marked exultantly, was a *salesman*, stepped forward and advised a bottle of magnesium citrate. The sale was made, and the clerk was commended for his astuteness.

Neither the druggist nor the editor in this case seemed to have a glimmering suspicion that the patient's life was imperiled by thus liquefying the stools that otherwise might have enveloped the foreign body and conducted it harmlessly through the intestinal tract. Had death followed, the clerk might have truthfully plead that, as he was not a doctor, he should not be expected to know the danger following his treatment. The public would generally have accepted this plea and the court sustained it; although to us it seems that, since the woman applied for advice on the assumption that the clerk was qualified to give

it and the latter accepted that assumption and gave the advice that resulted in death, both moral and legal responsibility should attach.

To impersonate an officer is sure to be followed by penalties if trouble results and the impersonator is caught. Is it less reprehensible to impersonate a doctor?

The remedy is the education of the people by ourselves. It does not take long to convince men that a costly watch should not be handed over to "just anyone" to tinker at, but must be entrusted only to an expert, known to be such.

If each of us were to do his individual part of this general duty, we should soon find the public realizing that there are experts in detecting and remedying defects in the working of the human machinery. We should hear less of dormant hipjoint disease aroused to activity by imprudent "osteopathy;" of children dying of easily curable disease because their parents were "science;" of people passing along to the incurable stages of maladies because they were exhorted to "forget it" when the first warnings of nature were given; of women's lives wrecked because the husband-to-be had entrusted the treatment of his gonorrhea to the corner druggist; or of the innumerable instances where neglect and ignorance aid the enemies of human life.

It's our own fault that these things are so—why not change them?

## CHANGES IN PERSONNEL

On July 29th Dr. Ralph M. Buffington, who had been appointed by the State Board of Health as its Veterinarian, reported for service, thus filling the vacancy lately created by the resignation of Dr. T. J. Mahaffy.

New appointments as county agents are as follows: Holmes county, Dr. Jno. D. Gable of Bonifay; Citrus county, Dr. J. H. Chiles of Floral City, vice Dr. J. D. Bennett, resigned; Orange county, Dr. P. P. Pillans of Orlando, vice Dr. W. Kilmer, resigned; and for the western portion of Lake county, Dr. W. P. McKee of Eustis. Dr. W. D. Bush of Leesburg, as usual, will act as agent for the eastern portion of Lake county.

## A NEW PUBLICATION ON MALARIA

The State Board of Health has received from the printer, and has ready for distribution, its publication 84, "Malaria, Its Prevention and Control." The articles which make up this publication were prepared by a special committee of the Florida Medical Association during 1910 and were issued through the State press. They can now be had in permanent pamphlet form upon application to this office.



# PROTECT YOUR BABY FROM FLIES

FLIES FOR FILTH AND FEVER    T SCREENS FOR CLEANLINESS AND HEALTH



Poster, graphically warning of the danger of flies to babies, which has just lately been issued by the Chicago Department of Health.

# FLORIDA

## Health Notes



### OFFICIAL BULLETIN

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Tampa, Fla.

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Pensacola, Fla.

HON. JOHN G. CHRISTOPHER,  
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Once to every man and nation comes the moment to decide,  
In the strife of Truth with Falsehood, for the good or evil side.

—Lowell.



### "TO THINE OWNSELF BE TRUE"

Over two thousand years ago a Roman governor asked,  
 "But what is Truth?" 'Twas Pilate's question put  
 To Truth itself, that deign'd him no reply.

The answer came in a drama whose conclusion was a tragedy, the sublime grandeur of which this world had never seen before. And since that time the toilers, those who seek after knowledge, and who delve into a study of hidden science, with an earnest desire to understand and to be confident in their enlightenment, have persistently labored to wrest Truth from their workings and thus to state nothing as a fact except when first tested by the knowledge of Truth itself. Human life is made up of certain characteristics which we know as principles. A principle is defined to be "a settled rule of action and a governing law of conduct which exercises a directing influence on the life and behavior of individuals," and is controlled in a great measure by heredity and environment.

Truth is a Divine principle, Faithfulness a conscience principle, Gratitude a loving principle, and Loyalty both a patriotic and self-respecting principle. Collectively these form character and character is in its truest analysis but an illustrative picture of human life.

A Truth is an incontrovertible fact, a knowledge gained from profound investigation, earnest study and crucial experimentation. When any one says he knows a thing, he is or must be firmly convinced and confidently certain of his statement, for unless the equation, whichever it may be, whether scientific, commercial, or psychological, has been worked out in its minutest detail of exactness, no one can say that he is certain of the result which he may have deduced; and here comes in the difference between knowledge and opinion. The first, naturally, carries conviction, while the latter is but a mere individual thought, which is worth only just as much as the standing or reputation of the person is valued by his neighbors, because an opinion is not a demonstrable fact, it may or may not be true, and it is the Truth only that teachers or those who pose as such, should attempt to impart.

No man, whether teacher, writer or plain every day citizen, can be true to the principle of manhood, either inherited or imbibed, who does not at least try to cultivate the spirit of earnest research, to gather Truth from thoughtful analysis of all subjects. He who persistently "twists the Truth to make a trap for fools," sooner or later will be distrusted, if not despised.

It is because the State Board of Health has diligently tried to be true to the people whom it delights to serve, and to the teaching and advice it has so consistently given to the people of Florida, that much stress is laid upon accurate information before speaking, so when the Board does state a fact it can be accepted, because gained by prolonged study, laboratory research and experience, and not from hearsay suppositions, or from self-conceited opinions of shallow thinkers.

### "SMALLPOX CURES CONSCIENCE"—ILL-FATED EXEMPTION

We are indebted to Dr. J. J. Johnstone, public vaccinator, Bolton, for the following copy of a parent's statement, who is filled with remorse for having followed the advice of anti-vaccinators:

SIGNED STATEMENT BY MRS. WHITTAKER,  
 53 Nile Street, Bolton.

I have good reason to be sorry for having taken out an exemption paper for one of my children—Benjamin Thomas Whittaker. I had all my other children vaccinated, but my husband and I were persuaded to get this one exempted, with the result that he took smallpox along with me, at Burnley, and we were both in the hospital at the same time.

I had been vaccinated in infancy, and my attack was so mild that I am scarcely marked at all; but the little boy, then one year old, had the disease in such a malignant form that he was blind for a week, his mouth was almost closed for several days, and the skin on his face came away in solid pieces of matter and scale, and he was afterwards scarred and pitted from head to foot, even down to his finger ends.

Before having the smallpox he was a bonnie boy, but during part of the time he was in the hospital I scarcely knew him, and now he is so terribly disfigured as hardly to be recognized as the same child.

Besides this, from being a fine healthy child, he has since been almost constantly ailing and delicate; and the whole of this change in him I blame upon the smallpox.

Never again would I expose a child of mine to the risk of getting that loathsome and disfiguring disease—how loathsome and disfiguring only those who have had experience of it can have any idea of. I would rather do anything than risk having it in one of my children; and if parents are wise they will let their children be vaccinated over and over again, rather than expose them to it.—*The Medical Officer*, London, England, June 17, 1911.

### ANTI-TYPHOID VACCINATION

Those of our readers who are interested in and who follow the advances made in serum therapy will be pleased, we know, to see what Dr. Jefferson Randolph Kean,\* of the United States army, has to say in the *Journal of the American Medical Association* on Typhoid Prophylaxis (prevention) in an article on "The Sanitary Record of the Maneuver Division" in Texas during the summer of this year.

"Perhaps one-fourth of the troops arrived at San Antonio already immunized by voluntary antityphoid inoculations given them at their posts. It was concurrently determined by the division commander and the war department that the time had arrived to make this procedure compulsory for troops taking the field, and it was so ordered and carried out as rapidly as the prophylactic culture could be supplied from the laboratory of the army medical school. The technic was simple. The site of puncture, usually the outer side of the left arm, was sponged off with alcohol and a small area sterilized with tincture of iodine, the injection made with a sterile syringe and the puncture sealed with collodion. The first dose is 0.5 c. c., the second and third being 1 c. c. each. An interval of ten days is allowed between doses, the entire procedure thus taking twenty days. The injection is made into the subcutaneous connective tissues and not into the muscles. There was practically no puncture infection, and the reaction was mild or absent in 90 per cent. of the cases treated. In no case was it followed by serious results. There were up to July 1, 8,097 men immunized.

1898.

TABLE SHOWING FOR THE REGIMENTS OF THE SECOND DIVISION OF THE SEVENTH ARMY CORPS, ASSEMBLED AT JACKSONVILLE, FLA., THE MORTALITY AND MORBIDITY FROM TYPHOID FEVER.

Regiments.	Mean Strength.	Cases of Typhoid Fever		Deaths from Typhoid Fever.	Deaths from all Diseases.
		Certain	Certain and Probable.		
Second Illinois .....	1,095	253	341	18	22
First North Carolina....	1,164	147	227	16	20
Second New Jersey.....	1,153	185	318	29	32
First Wisconsin .....	1,232	209	311	46	48
Fiftieth Iowa .....	1,097	164	253	33	33
Ninth Illinois .....	1,288	153	248	18	28
Second Virginia .....	1,220	105	152	17	20
Fourth Virginia .....	1,274	135	231	21	28
Forty-Ninth Iowa .....	1,236	378	612	50	50
Totals .....	10,759	1,729	2,693	248	281

\*Kean, J. R., M. D., lieutenant-colonel, medical corps, United States army. Washington, D. C. The Sanitary Record of the Maneuver Division, *Jour. Amer. Med. Assn.*, Chicago, v. 57, Aug. 26, 1911, pp. 713-714.

1911.

TABLE SHOWING FOR THE ORGANIZATIONS COMPOSING THE MANEUVER DIVISION AT SAN ANTONIO, TEXAS, THE MORBIDITY AND MORTALITY FROM TYPHOID FEVER, MARCH 10 TO JULY 10, 1911.\*

Organization.	Mean Strength June.	Cases of Typhoid Cer. and Prob.	Deaths from Typhoid Fever.	Deaths from all Diseases.
Eleventh Infantry .....	924	..	..	..
Fifteenth Infantry .....	969	..	..	2
Eighteenth Infantry .....	1,022	..	..	..
Thirteenth Infantry .....	929	..	..	..
Twenty-Second Infantry .....	1,033	..	..	..
Tenth Infantry .....	1,016	..	..	1
Seventeenth Infantry .....	954	..	..	..
Twenty-eighth Infantry .....	951	..	..	..
Third Field Artillery.....	847	..	..	2
Fourth Field Artillery.....	741	..	..	1
Engineer Battalion .....	536	..	..	1
Signal Corps .....	197	..	..	..
Ninth Cavalry .....	744	..	..	..
Eleventh Cavalry .....	1,143	..	..	3
Sanitary Troops .....	795	1†	..	1
Totals .....	12,801	1	0	11

\*In addition to the above a civilian teamster, not immunized, was admitted for typhoid fever in April.

†This patient, a private of the hospital corps, had not completed his immunization, having taken only two doses. The case was very mild and would perhaps have been overlooked but for the rule that blood cultures were made in all cases of fever of over forty-eight hours' duration. The Widal reaction has no diagnostic value in immunized persons, as all respond to it. Forty-nine cases of typhoid fever, with nineteen deaths, were reported as occurring in the city of San Antonio during this period.

The immense advance in camp sanitation and particularly the value of this protective measure can be estimated by comparing the typhoid incidence of this camp with that of the Second Division, Seventh Army Corps, which was organized at Jacksonville, Fla., about June 1, 1898, and remained there in camp until October, some of the regiments leaving in September. This division was not conspicuously unfortunate in its typhoid record for that time, and is selected because of the close similarity of its conditions of service to those of the Maneuver Division. The two divisions were encamped in nearly the same latitude and for about the same length of time, and each had a good camp site and an artesian water supply of unimpeachable purity. While the period in camp of the Second Division, Seventh Army Corps, was later in the year, the number of men involved was larger for the Maneuver Division. The accompanying table referring to the former is taken from the celebrated "Report on Typhoid Fever in U. S. Military Camps in the Spanish War," by Reed, Vaughn and Shakespeare, Vol. 1, page 609.



### HORRIBLE, EH?

The Associated Press informs the country that the war department, presumably acting under the advice of the surgeon-general of the United States army, has made vaccination against typhoid fever a compulsory feature of military sanitation. We *now* may be expected to hear various and deep imprecations hurled against Surgeon-General Torney from the anti-vaccinationists and self-constituted supervisors and would-be directors of all things mundane, because of this regulation, and that—not that he shall be asked to resign his position—but that he be KICKED OUT OF THE SERVICE for DARING to base a recommendation upon a knowledge gained from study and investigation.

### SENATOR SLOAN EXPLAINS NEW FLY SCREEN LAW

*Tallahassee True Democrat, June 16, 1911.*

There seems to be a misunderstanding as to provisions of the law enacted by the last legislature, requiring hotels and other eating places, to screen against flies. Some papers in mentioning this matter, have stated that all openings will have to be screened. As author of the bill I will state that only kitchens, dining rooms and passageways between same, in hotels, restaurants, and boarding houses, will have to be screened, under provisions of this law. The only reason why the bill did not require the screening of all openings was because we feared it would not pass if it did. This law, if enforced, will not only be a protection to those who travel, and who must stop and eat somewhere, regardless of whether conditions are inviting, and conducive to comfort and health or not, being compelled as a rule, as conditions are now in the average eating place, to eat with the flies, with all the nausea which it causes, and risk which it involves, but it would be a splendid advertisement for our State, and a strong drawing card to those without our borders, which will repay many times over the small cost of complying with its provisions.

When people generally come to realize the great danger of too much familiarity with the common house fly, and that it costs much less to destroy their breeding places than it does to pay for treatment of diseases they cause, and to bury those who die from typhoid fever and other diseases, due largely to eating and drinking after this germ-laden product of the filth holes, and frequenter of the garbage barrel, and open privy, and other places of filth, it will not be necessary to force people by legislation to protect themselves against this one of the most deadly enemies of humanity. A source of great danger, which can be eliminated (and should be) by incorporated cities and towns is the sell-

ing of fruits and other articles of diet by fruit dealers and others selling this class of goods without making any effort to protect same from flies.

The largely increased trade which would result, especially on fruit, if people felt that they could eat same, without possibility of at the same time eating a case of typhoid fever or other disease, would repay many times over the case of keeping flies out. Some eating house people are complaining of this law, but if it is rigidly enforced it will save numbers of human lives, which should justify its passage and enforcement.

Respectfully,

D. H. SLOAN.

### SWAT HIM!

Consider now the little fly, whose name is rhymed with "baby-bye."

He has his birth in the manure, crawls forth and loiters in the sewer, and, smeared with deadly typhoid germs, he leaves his brother maggot-worms, unfurls his dainty wings of silk and dumps his microbes in the milk, where their huge numbers mount and mount, increasing the bacterial count, until they reach the food supply some woman feeds her "baby-bye."

The fly comes gaily unto us, his feet all gummed with poison-pus, and singing clear his song so sweet, alights and cleans them on the meat. He gathers scarlet-fever spores and leaves them on the walls and floors; he is not proud, and oft will stoop to carry heavy loads of croup, and place it where its awful death may come and go with baby's breath. Oh, do not call him indolent! He calls that summer day misspent in which he's failed to load the breeze with the live germs of some disease; and if he finds them not, though hurt, he'll be content with just plain dirt.

Consider well the little fly, who buzzes so 'round "baby-bye."—*Exchange.*

### THE MONEY VALUE OF BABIES

Dr. Martin Frederick, Health Officer of Cleveland, Ohio, is reported as saying that it costs about \$5,000.00 to raise a child from birth to the age of twenty years. At twenty years the average value of a child—supposedly a male—is \$5,000.00, based on an earning capacity of \$300 a year, a 6 per cent return on the investment.

Dr. Frederick further speculates that by the age of 30 the average man is worth \$16,000.00, that is, he has an earning capacity which is equal to 6 per cent on an investment of \$16,000.00. At 30 years the man has cost \$10,150.00 for growth and maintenance. So at that age

he has yielded a net gain of \$8,850.00. The whole value of a city, a State or a country lies in its people, says Dr. Frederick. To tell what a man in Cleveland is worth, all you have to do is to take the actual value of the city and divide it by the number of persons living here.

"Manhattan Island was once sold for a saddle and bridle by Indians. It wasn't worth any more than that, either. Its value now simply lies in the people it has. Its capitalization is based on the capitalization of its people.

"What would Cleveland be worth if you should move every one away from here? What would one of the skyscrapers here be worth if there were no people to occupy it?"

And if Dr. Frederick had gone a little further and said that the value of any place lies in the healthfulness of the people—for increase of population and expansion of investments with addition of capitalization follow good health conditions of living, not sickness and disease—he would have clinched his argument with the hammer of truth and fact.

Who would not give this world's stock of dogs, if needs be, in exchange for some loved one—father, mother, brother, sister, son or daughter, which had been bitten by a mad dog? Is there any comparison between the value placed upon the dog and person? Who would not give worlds for the relief and restoration of a loved one who suffers the agonizing and most awful death from hydrophobia? Why take chances on so many absolutely worthless dogs roaming about our town and county? Who would not gladly kill the dog after he had bitten some one? If he's a worthless sort of dog why wouldn't it be better to put him out of the way before he bites some one? Are these serious questions? May you never know from experience. Put the worthless dog out of the way or put a muzzle on him.—*Marianna Times-Courier*, June 15, 1911.

A Chinaman, renting from a lawyer, had to give up his house, and wanted the last month's rent free. The lawyer couldn't see it that way. But, Soon Key explained, "That is law." Whereupon there was much merriment that a Chinaman should try to tell a lawyer what the law was.

Is there anything strange about that, when doctors and health officers are told something about medicine and sanitation every day, by people who know as much about either as a Chinaman knows about law?

## FILTERS

One day a man came into the office of the State Board of Health to request that we have the laboratory test out a water filter that he has. What he wanted was to show that this filter will filter out typhoid germs. He wanted the laboratory to put a culture of typhoid germs in water and then run it through the filter and see if any germs could be found afterward. What he was leading up to was a testimonial from the State Board of Health as to the value of his filter.

All this looked very innocent on its face. A thoroughly fair proposition all round. He had a filter to sell. He made certain claims for it. He wanted to show by the State Board of Health that it will do what he claims.

But wait. This done he would go out to sell it. He would tell that it will filter typhoid germs out of water. He would tell that the State Board of Health had shown this to be true. And the people would buy, thinking they were getting protection against typhoid fever.

Now are they? Would it make, say, the Jacksonville water any safer against typhoid fever to have it filtered? Certainly not. The water of Jacksonville is above reproach. So it is with most of the water in Florida. The drinking water of the State all comes from underground, so far as I know, with the single exception of Orlando, which gets it from a lake. And that lake, by the way, is a spring lake. In some parts of the State it comes from deep wells, and some from shallow. That from the deep wells is very pure, except for the soluble salts that it contains. And in a general way the spring water and the deep artesian water are very much alike. The shallow wells give a pure water also. The ground is an efficient filter through which surface water has to pass before it is returned by the pump. This has been tried out pretty severely here in Jacksonville. A number of city pumps, ranging in depth from six to eighteen feet, and located anywhere within ten to fifty feet of a surface closet, were examined and found to be free from sewage contamination, showing the great efficiency of the sand as a filter. In fact there are one or two springs in this State selling water on the solitary grounds of its purity. The analysis shows that it is of very low soluble salt content. In fact it is little or nothing more than rain water which has percolated down through the ground and burst up in a spring. Several wells and springs of similar analysis are now marketed.

From all of which it will be seen that as a rule we have no typhoid germs in the water to be filtered out. Then why install a filter to filter out something that is not there? Why play Don Quixote? Would it



be exactly fair for the Board to recommend a filter, however efficient it might be, when the need for it doesn't exist? And wouldn't it create the impression that the State Board of Health considered that the water needed filtering?

However good the filter might be, the Board looks upon it as a sort of harmless, though rather expensive nuisance. There is no need for a typhoid water filter where typhoid is not water borne. If he will send us a fly filter it will be more to the purpose.

### BUT HOW CAN WE DO IT?

I have before me the Monthly Bulletin of the Ohio State Board of Health. Dr. Probst is Secretary of the State Board of Health of Ohio and a good man—a wide-awake health officer.

Looking over the contents I saw: How shall we combat measles and whooping-cough? (Discussion at conference of State and local boards of health, held at Columbus, January 26th and 27th, 1911.) I pricked up my ears, for this was the thing long sought after. How to control measles, whooping-cough, mumps, chickenpox, diphtheria, scarlatina, or even smallpox when people refuse to get vaccinated. I hoped to get something new on it, for they are well advanced in sanitary matters in Ohio. And when they all put their heads together, as they do in these conferences, I think I had a right to expect something of value. The discussion was confined to measles and whooping-cough. Dr. Hugg led the way. He had quarantined them awhile and then had given it up, in disgust. Dr. McGee thought the matter of caring for measles, whooping-cough and chickenpox was done all over the State in a slipshod way. He wanted them to be progressive and wipe these diseases out. That was the man I wanted to hear from. But he didn't tell how to do it, and that was the thing I wanted to know. Dr. Ford took up the matter of excluding children from school that had been exposed to the diseases, but that didn't solve the problem—didn't tell us how to control them. Dr. McCracken was quite pleased with placarding houses. They had been doing it a year or so. They would placard a house and depend upon the neighbors to report the others and thus they got a good many of them. He told how in one afternoon they rounded up and placarded twenty houses. But that was not what I wanted to know. I wanted to know how to keep from having the cases to be placarded. Dr. Hoyer placards for measles and has a very simple way of finding the cases. When a child is out of school 48 hours the truant officer goes after him. But that still didn't give the information I want—how to prevent the disease. Dr. Patter-

son was in favor of quarantining all cases. But that is not the point, please—tell me how to prevent the disease.

I read the report carefully and found the same troubles there that we have here. Mild cases. Cases not reported. Cases not recognized. Health officers quarantining, making a big noise, and the disease still spreading. One of the doctors who was quite satisfied with his methods had twenty houses to placard in a single afternoon! We have all that, too!

In the language of John Hay:

I leave the story where I did begin.

Dr. McConnell of Eustis perpetrated the following: The man that doesn't believe smallpox can be prevented by vaccination is like the old farmer who the traveler was telling of the various animals he had seen. Finally he told of the giraffe, with his long fore legs and short hind ones, and his slender neck, and spots all over; but that was too much for the farmer's credulity. He couldn't believe it. A circus came to town and the traveler took the farmer to show him. The farmer walked with hands in pocket, all around the tall animal, and looked at him from top to toe, and then walked off with the disgusted and final remark: "There ain't no such animal."

Isn't it strange that there is one alive to tell the story? Any person you meet is liable to be a typhoid carrier and it is dangerous to shake hands with him. Any cup you drink from may have some tuberculosis germs or something worse on it, and you have to drink or go thirsty. Any child may be a diphtheria carrier and spread death and destruction in its innocent wake wherever it goes. It is dangerous to go in public places, because you are sure to get exposed to some kind of carrier of disease. It is dangerous to ride in the cars because disease has recently been there. It is dangerous to shake hands for fear of the ubiquitous "carrier." It is dangerous to take communion for the same reason that taboos the cup. It is dangerous to kiss your wife lest you give her a microbe or get one yourself. It is dangerous to sleep in the house because the air is impure. It is dangerous to sleep out of doors because you may take cold. It is dangerous to eat without "Fletcherizing" your food. It is equally dangerous to chew with defective teeth. It is dangerous to eat cornbread for fear of getting pellagra. Dangerous to drink milk for fear of typhoid. Dangerous to eat fish for fear of food poisoning. Dangerous to get sick for fear of

a doctor—dangerous to keep well for fear of work—where will we land, anyway?

There is a story of Old King Canute, as old as the oldest hills. The courtiers of the king used to say to him that he could do everything he wished. They would even say to him that the very waves of the sea would obey his mandates. Finally one day the king got tired of all this flattery. Then he took a stool and went out and sat on the beach and told the waves not to come up and wet his feet, not to dare wet his feet. And the courtiers said they wouldn't do it. But they did. And after that the king reminded them of the waves when they got to telling him of his greatness.

But old King Canute is dead these many years. When people are great these days they don't test it out that way. Poor old King Canute!

### TO ERADICATE HOOKWORMS IN COUNTY

(*Marianna Times-Courier*, June 15, 1911.)

At a meeting of Jackson County Medical Society here, on May 9th, we were requested to state in our columns that all indigent individuals residing in this county and suffering with hookworm would be treated free of charge provided they came before the society, which meets every second Tuesday in the county court house at 2:30 p. m. As a result of this notice, on last Tuesday there were thirteen diagnoses made for hookworm, and treatment given. The doctors of the county are certainly to be commended for this noble work, especially when we consider that they not only give their time but actually pay for the medicine used in treating them out of their pockets. This is a golden opportunity for all poor people in this county and the opportunity should not be allowed to pass unimproved. The doctors inform us there are hundreds of cases in this county, suffering with this malady, who are rendered practically worthless to themselves, their families and communities and that with proper treatment the picture would be reversed. So let us give the Jackson County Medical Society our hearty support and try to entirely eradicate our county of this life-sapping disease. Besides our local physicians, the following were present at the meeting on last Tuesday: Dr. Patterson, of Malone; Burket and Willis, of Greenwood; Harris and McLeod, of Cypress, and Ryals, of Dellwood. Many others sent regrets, they could not attend the meeting on account of duty.

### ABOLISHING THE DRINKING GLASSES

The following article is taken from *The Homoeopathic Envoy*. It is a little overdrawn, but—

Prompted by the wisdom with which it is endowed the health board of the State of New Jersey has "ordered" that the tumblers, or drinking glasses, heretofore found under the faucet of the ice coolers on railroad cars, etc., must be removed. This order was obeyed and since then the public is confronted with a cooler full of water but no means of getting at it. The reason is "germs," of course. No one is known to have contracted disease from these glasses, but the theory, on which the action is based demonstrates to the theorists that every "germ" disease known ought to be spread by these glasses, even if it isn't, so, having the power, the board acted on the theory and let facts go hang. Hundreds, perhaps many thousands, of men, women and children have suffered severely during the intensely hot days from thirst, much aggravated by the dust. To be sure every one may provide the "individual cup," which will be free from "germs," but its owner's. This costs some money, necessitates carrying a tin cup in your pocket or satchel, and, so carried, is liable to become the dwelling of all sorts of "germs." To be consistent the board ought to compel the people to carry sterilizing outfits to make these cups safe from "germs." Also, while they are about it, they should order every one to provide himself with individual sterilized rubber covers for the car seats, rubber gloves for hands and sterilized gauze for the face, because the car seats offer a much better refuge for "germs" than does the clear, smooth glass which was rinsed every time it was used by most persons.

When health boards fall to fighting "germs" invisible to all but the canny bacteriologist, it is a debatable question whether they do not hurt the people far more than they do the probably mythical "germ"—mythical because it looks as if the day would come when they will have to acknowledge that the "germ" is but a tissue change caused by that thing we term disease, and know not what it is, whence it comes or whither it goes. Cleanliness, individual drinking vessels, etc., are very desirable, but expediency and common sense should rule in such matters as watering the public.

"Mrs. Baye is simply mad on the subject of germs, and sterilizes or filters everything in the house."

"How does she get along with her family?"

"Oh, even her relations are strained."—*Bulletin Texas State Board of Health*.



**Specimens received and examined in the Bacteriological Laboratories of the State Board of Health of Florida during the first six months of 1911.**

TOTALS BY MONTHS, 1911, ALL LABORATORIES, COMPARED TO 1910 TOTALS, SAME PERIOD.

	Jan.	Feb.	Mar.	Apr.	May.	June.	Total 1911.	Total 1910.	Increase.	Decrease.
Diphtheria*. . .	87	107	75	101	87	47	504	284	220	...
Gonorrhea . . .	45	62	95	70	97	76	445	268	177	...
Hookworms. . .	411	368	407	561	536	511	2794	3435	...	641
Other animal parasites. . .	13	22	27	14	24	21	121	129	...	8
Malaria. . . . .	455	340	445	469	561	520	2790	820	1970	...
Rabies. . . . .	2	10	33	24	15	15	99	34	65	...
Tuberculosis . .	226	172	255	237	243	163	1296	807	489	...
Typhoid fever. .	126	133	250	331	364	409	1613	649	964	...
Water. . . . .	5	...	9	27	6	4	51	24	27	...
Miscellaneous†. .	278	209	163	91	92	141	974	345	629	...
Totals, January to June, 1911	1648	1423	1759	1925	2025	1907	10687	...	4541	649
Totals, January to June, 1910.	786	749	1025	1418	1418	1399	...	6795	...	...
Increase, 1911.	862	674	734	507	607	508	...	...	3892	...

TOTALS BY LABORATORIES, FIRST SIX MONTHS OF 1911, COMPARED TO SAME PERIOD, 1910.

	Jan.	Feb.	Mar.	Apr.	May.	June.	Total 1911.	Total 1910.	Increase.	Decrease.
Jacksonville. . .	957	717	892	992	1057	907	5522	5759	...	237
Tampa. . . . .	506	549	704	792	817	854	4222	1036	3186	...
Pensacola. . . .	185	157	163	141	151	146	943	(a)	943	...
	1648	1423	1759	1925	2025	1907	10687	6795	...	...
									3892	

### COMMENT

A study of the above figures showing the scope and amount of work done by the Laboratory Division of the State Board of Health during the first six months of 1911, as compared to the same period in 1910, is interesting and valuable in that it shows a steady and healthy growth of the work done each year, and demonstrates the value which such an institution may become to a State. The amount and scope of work of the laboratories does not, on account of space required, allow the NOTES to give here the number of positive and negative examinations of each character of specimens, but this will be published in full next year in the report of the Board for 1911.

\*Swabs and cultures.

†"Miscellaneous" includes blood counts, pathological examinations, animal inoculations, leprosy, ophthalmia, etc.

(a) The Pensacola Laboratory was opened June 28, 1910.

It is to be regretted that the number of examinations made for animal parasites has decreased the first six months over the same period in 1910, but this was not only expected, but could not be prevented. The Assistant State Health Officers have not been enabled this year to give the attention desired to the campaign for the amelioration of hookworm disease, for they have been busily engaged in vaccinating against and caring for smallpox in every part of the State. Then, too, many physicians who are doing the principal work in this State in hookworm disease have equipped themselves with microscopes and make their examinations in their own offices. Other physicians who submit specimens to the laboratory for this examination have adopted the system in many instances of giving two or three courses of thymol before a second specimen is submitted for examination. All this has had a tendency to lessen the number of hookworm examinations in the State Laboratories, yet it is believed that the disease is being recognized and treated in a larger number of cases than ever before.

### FLY-SONG

Ten little flies  
All in a line;  
One got a swat!  
Then there were \* \* \* \* \*  
Nine little flies  
Grimly sedate,  
Licking their chops—  
Swat! There were \* \* \* \* \*  
Eight little flies  
Raising some more—  
Swat! Swat! Swat! Swat!  
Then there were \* \* \* \* \*  
Four little flies  
Colored green-blue;  
Swat! (Ain't it easy!)  
Then there were \* \*  
Two little flies  
Dodged the civilian—  
Early next day  
There were a million!

—Buffalo News.

### TO PHYSICIANS AND PARENTS

While children and grown-ups are undergoing treatment for hookworm disease is a good time to impress upon them the absolute necessity of avoiding future reinfection by the parasite. Emphasis should be laid upon the urgency of wearing proper shoes, as well as the installation of correct methods of disposing of sewage. Householders living

in rural districts or small towns where there are no municipal systems of sewage disposal should provide sanitary privies. This will not only prevent hookworm disease but will reduce the prevalence of typhoid fever.

### COUNTY AGENTS STATE BOARD OF HEALTH OF FLORIDA

(August 7, 1911.)

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# FLORIDA Health Notes



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*Ill fares the land, to threatening ills a prey,  
Where wealth accumulates and men decay.*  
—Goldsmith.



### WHAT IS A SERUM—WHAT IS VACCINE?

The terms serum and vaccine have frequently been used in these pages, but the NOTES wonders if the reader understands exactly what they mean when connected with preventive medicine.

Suppose the NOTES tries to tell you and to make it plain. Please remember, though, that the NOTES is not now speaking to doctors but to the laity—the average every-day citizen and reader, to whom technical terms are mystifying.

But first a little anatomy, so that the subject of serum-therapy can be correctly understood. The blood is a "fluid which circulates through the heart arteries and veins supplying nutritive material to all parts of the body." In the human arterial blood is bright red, and venous blood a darker color. The blood consists of about 79 per cent of water and 21 per cent of solid matter. When blood is exposed to the atmosphere it coagulates, that is to say, separates into a clot-fibrine and into a yellowish fluid which is called serum. Now it is by this serum that the NOTES wishes to make it plain to you how a prevention—immunization the sanitarians call it, and it is a better word—is secured against certain contagious diseases. If you have read the last annual report of the State Board of Health you will know what is about to be said, because the story was then told to you—the people of Florida—very concisely and simply. It was explained that when bacillus—a germ—of certain contagious disease is injected into an animal which is susceptible, that the special disease can be produced at will in this animal. The injection makes the animal sick, but if repeated and repeated there comes a period or time when the animal is no more affected by the injection of the germ, and then it is known that it is protected against the particular disease; it is immunized, as the bacteriologists and sanitist say. There is produced in the animal's blood by repeated injections an antitoxin, which is an anti-body generated in the blood serum of the blood of the animal which has been injected by a specific bacterium. Is this plain; do you understand?

Now you ask how does a human become immune through an animal becoming immune? In this way: After the animal has reached a stage where the injection of a specific organism of the contagious disease no longer makes it sick, it is bled and the serum of the blood is examined in the laboratory to find out how rich it is in these anti-bodies, called anti-toxin, and then tests are made on animals which have previously been injected with the virulent organism, artificially grown in the laboratory, to see how much of the serum which has been taken from the immunized animal will be required to neutralize the poison

in the animal which has been inoculated with the artificially grown germs; and the injection of the immunized serum, combining with the toxin—the poison—produced by the specific bacterium, destroys its specific effect, and hence is known as an anti-toxin. This is serum-therapy; namely, the treatment of individuals to prevent an occurrence of a special contagious disorder by serum which has been taken from an animal in whose blood anti-bodies have been formed to overcome the toxin—poison—of the contagious disorder. In laboratory language: a phagocytic action, by which the resistant properties of the human economy hold in check the inroads of disease until overpowered by an excessive activity of the disease products.

It has been asked and very sensibly, too: In what respects, as far as results go, does serum anti-toxin differ from a vaccine? Practically there is no difference, the principle of immunization being the same. Again the bacteriologist comes to our assistance and tells us that a vaccine is a specially prepared bacillus of a specific disease, grown in the laboratory, and when killed and suspended in normal salt solution, can then be injected into the human to prevent an occurrence of certain diseases, for when injected the material or virus inserted increases the power of the patient's blood serum or leucocytes—the white or colorless blood corpuscles of the blood—to take up and destroy the diseased bacteria in the system of the person so treated.

There is this difference, however, between serum-therapy and vaccine-therapy. In serum-therapy the immunized serum when injected into the individual either sick with the contagious disease or liable to be infected by contact, overcomes the destructive quality of the specific organism, and assists the natural forces to throw off from the system the baneful effects of the specific poison, while in vaccine-therapy the effort is made to cause through the vaccine virus, whether injected or rubbed in, a mild but specific instance of the disease, thus the individual becomes immune by forming in his own blood an anti-body which affords protection from a greater and more virulent outburst of the disease. A striking instance of the former is in the administration of the anti-toxin for diphtheria, both as a curative as well as an immunizing agent, and of the Jenner vaccine as a protection and also an immunization against smallpox.

The NOTES hopes that it has made itself clear in this talk. It advises, however, all those who are interested in this subject of immunization against disease to ask for a copy of the last annual report of the State Board of Health, for the subject is gone more into detail there than space will allow the technique methods of manufacture and administration to be dwelt on here.



### IRRATIONAL BIAS; WILFUL OPPOSITION; WHICH?

It is surprising that in this day of general enlightenment on all branches of scientific discovery, when inquiry into methods of ascertaining the truth of well established facts is so thorough and painstaking, that there should be any one who doubts, much less challenges, proofs which the microscope has established and which extended experimental research has verified. Articles on serum-therapeutics by writers whose names command respect in the literary world and whose opinions can not be pooh-hoed as visionary or purely theoretical, have appeared in the popular magazines from time to time, and the conclusions which they have come to have invariably been to the effect that serum-therapy holds forth more promise for future benefit to the human family in preventive measures against disease than any treatment or other medicaments; therefore, it is due to no lack of information, which may be said to have been spread broadcast, that any one can now be ignorant of these means which are known as preventive and by which sickness can be avoided or suppressed. The dream of the sanitist has always been for means and methods by which sickness can be avoided, the employment of agencies whereby, without causing illness or producing but temporary inconvenience, persons can be rendered immune to contagious disease. When this hope is fulfilled the ideal in this respect may be reached, although the millennium may then have come, when there will be no more need of cure, for it is said that there will be "no more suffering nor death," but until that time arrives there is, nevertheless, good reason to believe from the rapid advance which has already been made in laboratory investigations, and by the progressive desire for deeper research, which is constantly being shown by those who are giving patient labor and earnest thought that there will be brought forth from well tested observations and a plodding into what has hitherto seemed to be hidden mysteries, such knowledge that there will be but few of the contagious diseases for which an immunizing vaccine or serum can not be found, so that the human family when exposed to a specific germ disease may be protected, whether the exposure is by direct contagion or by subtle influence not known.

Thanks to Jenner, it is now known—known, not supposed nor conjectured—that smallpox is prevented by vaccination. It is also known, thanks to Pasteur, that hydrophobia can be prevented after the bite of a rabid animal—whether in the human or in the lower animal—by the injection of a serum; a preparation which by gradation of strength gives to the system—blood and nervous tissue—of the person bitten an ability

to oppose and antagonize the specific virus of rabies which the saliva of the rabid animal has conveyed. Thanks to Behring, it is now known that after a series of injections of the diphtheria bacillus into a horse, that the serum of the blood of the horse finally reaches a point which will negative the action of the bacillus of diphtheria in the human and exercise both a curative effect on the sick as well as preventive result on those who may have been exposed to diphtheria.

Thanks both to Behring and Kitasato, gunshot wounds, accidents from fireworks, powder burns of toy pistols, and injuries received around stables are robbed of dread and fear, when treated immediately with the anti-toxin which they discovered, and which when early administered will prevent lockjaw.

It is due to the investigations of Chantemesse and Widal, and later on to Leishman and Wright, that it is now known that an emulsion of the dead bacillus of typhoid fever, when injected into a human on three different occasions in two different potentialities, will prevent an attack of typhoid fever, and give an immunity to the disease for several years.

To Koch and Kitasato is due the credit for the discovery that by a special preparation of the cholera bacillus, cholera can be prevented in those exposed. So, too, in regards to plague, immunization is brought about in two ways: (a) active immunization, which is the inoculation of cultures of the plague bacillus or its products, or, (b) passive immunization, which is the inoculation of blood sera of animals which have undergone active immunization.

Quite recently much interest has been manifested by the agricultural districts of the State in the immunity which hog cholera serum gives to the swineherd when administered in the presence of hog cholera. Demands for the service of the veterinarian of the State Board of Health have come thick and fast from almost every nook and cranny of the State, when it was known that the last legislature had authorized the State Board of Health to distribute this vaccine free to the farmers of the State. (A pause here made long enough to say that all requests have been entered and complied with as rapidly as possible and the Board has added to its personnel in the veterinary division of its work by enlisting the assistants of the State Health Officer to help out in this direction.)

The laboratory has lately announced that soon another of the contagious diseases will be added to the list for which protective vaccine is found. Measles have been artificially produced in monkeys and the germ of the disease isolated.



Now, serum-therapy or therapeutics is nothing more nor less than effecting an immunity against a specific disease by producing in an individual a mild attack, so mild as to be hardly perceptible, of the malady itself—that the individual suffers no discomfort or but slight inconvenience, yet is thoroughly protected when exposed. This is not a supposition nor a theory, but is a *fact*, proven, seen and demonstrated in thousands and thousands of persons yearly.

What can be said, therefore, of people as a class or of individuals, especially physicians, who deny the efficiency of such preventive means against disease and oppose the administration of these agents which, when used, will ward off sickness or will check illness after it has been contracted?

These thoughts have been suggested by an incident occurring quite lately in this State, when some doctors—the NOTES dislikes to tell of it—opposed the administration of diphtheria antitoxin either as a preventive measure or curative agent. What can be said of these men who call themselves teachers of the people—for doctor means teacher—and who in the face of proven facts, persistently and deliberately reject the result of laboratory findings and the teaching of eminent investigators?

Elsewhere in this number is reproduced an article from *American Medicine* on the mortality from diphtheria, which bears on this point, especially on the responsibility of the doctor, in the paragraph which says, "For a medical man to assume an antagonistic attitude to antitoxin comes perilously near to wilful negligence, and the time is close at hand when failure to use antitoxin will impose criminal as well as civil responsibility."

### ANTITYPHOID VACCINATION

The following extracts concerning vaccination against typhoid fever are taken from the *Public Health Reports* of the United States Public Health and Marine Hospital Service for October 6, 1911, and should be entertaining and instructive to those readers interested in public health work, and especially in preventive measures against disease now being almost daily brought to light through serum therapeutics. The entire article, as published in the *Public Health Reports*, can not, on account of its length, be reproduced here.

"The prevalence of typhoid fever in practically every section of the United States makes any measure which will protect the individual or assist in preventing the spread of the disease of importance to health

authorities, and of general interest. The production of artificial immunity against typhoid fever by antityphoid vaccination constitutes such a measure, and promises to have a considerable sphere of usefulness, especially for those about to enter conditions in which they will be unduly exposed to the disease, namely, physicians, nurses, hospital internes and externes, travelers, and armies.

"However, although antityphoid vaccination is useful in the protection of the individual under the limitations noted in the report which follows, it should in no wise supplant the measures now in use and advocated for the prevention of the spread of the disease from the sick to the well. It should not lessen the precautions at the bedside, the disinfection of typhoid excreta in the household, the keeping of water supplies, both private and public, free from contamination, the purification of public water supplies where indicated, and the supervision of the production and sale of milk and other foodstuffs.

"Antityphoid vaccine can now be obtained, by physicians wishing to use it, in the same way and at the same places as other biological products such as diphtheria antitoxin and vaccine for smallpox.

"A commission appointed by the Academy of Medicine of Paris to report upon the status of antityphoid vaccination has recently made its report. The commission consisted of Mm. Chantemesse, Delorme, Kelsch, Landouzy, Netter, Roux, Thoinet, Vaillard, Widai and H. Vincent, *rapporteur*. The report was written by H. Vincent and the conclusions were adopted by the commission. The report consists largely of a review of the experiments and statistics upon which the use of antityphoid vaccine is based.

"Because of the interest and importance of the subject to health authorities and others, a translation has been made of extracts from this report, published in the April, 1911, Bulletin of the International Office of Public Hygiene at Paris. For the convenience of the reader the order of the report has been changed and the summary of the report and the conclusions of the commission placed first and the discussion and statistics last."—*Extracts from the Report of the Commission Appointed by the Academy of Medicine of Paris.\** (Translated by Joseph W. Schereschewsky, passed assistant surgeon, United States Public Health and Marine Hospital Service.)

### SUMMARY.

The facts and information contained in this report, as well as the indications for antityphoid vaccination may be summarized as follows:

\*From the Bull. de l'Off. Int. d'Hyg., Publ., Apr., 1911, pp. 631-662.



First: Antityphoid vaccination has for several years been applied with success in the English, German, and American Army. More than 100,000 persons have been inoculated either in their native country or especially in colonies where these soldiers were sent and where typhoid fever is prevalent.

The antityphoid vaccines, hitherto the most frequently employed, have been the bacillary vaccines—that is, cultures of Eberth's bacillus killed by heat.

Second: The benefits conferred by these preventive inoculations are revealed by comparative statistics of the typhoid morbidity and mortality, on the one hand, among soldiers subjected to the vaccination and, on the other, among the unvaccinated. The former have presented a case incidence of typhoid fever at least one-half that of the latter.

Third: Antityphoid vaccination does not accomplish the complete disappearance of this infectious disease in the communities where it is practiced, but it diminishes very notably its frequency. Moreover, such of the vaccinated who contract typhoid fever notwithstanding have much milder attacks than unvaccinated subjects. The percentage of deaths supervening among the former is one-half that of the non-vaccinated typhoid patients.

Fourth: A single inoculation of bacillary vaccine assures a less efficacious protection than two or three injections. For vaccination by autolysates of living bacteria four injections are made.

Fifth: Relative or complete, the immunity engendered by anti-typhoid vaccination appears to last from one year (Pfeiffer-Kolle vaccine) to four years (Wright's vaccine). It is, therefore, advantageous, if it is desired to prolong this period of immunity, to have recourse to revaccination.

Sixth: No matter which vaccine is used, antityphoid vaccination has shown itself to be without danger for the very numerous persons who have been inoculated.

From the observations of Wright, Pfeiffer and Kolle, Bassenge and Mayer, and others, it appears that injections of vaccines of dead bacilli, while harmless in themselves, give rise often to fever as well as painful local and general symptoms. These disappear in from 24 to 48 hours.

The proposition has been made to employ the autolysate of living bacilli as an antigen. This vaccine is much better borne, and causes but little pain or none at all.

Seventh: The inoculation of bacillary antityphoid vaccine may determine at times, for a period of from one to three weeks, a state of diminished resistance on the part of the subject to infection with Eberth's bacillus. This may result in a temporary predisposition to this infection. Although this is denied by Leishman and others, nevertheless, as a precautionary measure, vaccinal inoculations should never be made during an epidemic nor in persons who certainly have been exposed within less than three weeks to the contagion of typhoid fever. Preventive vaccination should, therefore, be generally undertaken before the usual time of the apparition of epidemics in localities and communities where they are habitually observed.

Eighth: For the same reason, and during the period immediately following inoculations, every person vaccinated against typhoid fever should take the strictest precautions in order to avoid the chances of typhoid infection by a careful watch upon the water that is drunk and the food that is eaten as well as by rigorous personal hygiene and cleanliness. The period during which such precautions must be taken has a duration of two or three weeks at the most.

Ninth: In the Army and Navy antityphoid vaccination is destined to render real service, more particularly in Algeria and Tunis, as well as in the colonies where typhoid fever is frequent and severe.

When there are no cases of typhoid fever and no danger of an epidemic at the place of destination of soldiers and sailors, the inoculations may be undertaken upon their arrival. In the contrary event, the inoculations should precede, by at least three weeks, the arrival of these young men in colonies where the disease exists in endemic form.

Tenth: Antityphoid vaccination should be formally interdicted for every subject in whom typhoid fever seems imminent or at the beginning of an attack. It may, indeed, aggravate the disease.

Antityphoid vaccination should be practiced only upon perfectly healthy subjects, free from all organic or other defects and from local or general affections, no matter what their nature, especially tuberculosis.

Except in unusual circumstances, the vaccination of debilitated and delicate persons, who are likely to exhibit too severe a reaction to the antigen, is to be avoided.

Eleventh: Antityphoid vaccination, under present circumstances, can only be voluntary.

Nevertheless, it is highly important and advantageous to encourage its use by instructing communities as well as the military and the



numerous other persons exposed to typhoid infection as to the degree of protection that may be expected from this specific method of immunization.

Twelfth: The different antityphoid vaccines derived from cultures of dead bacilli, whose efficacy has been demonstrated upon animals by Chantemesse and Widal, and subsequently upon man by Pfeiffer and Kolle, Wright and others, have shown themselves to be equally efficacious, with the exception that the immunity from Wright's vaccine is more prolonged.

By reason of the painful reactions which the bacillary vaccines frequently give rise to, in vaccinated subjects, it is expedient to consider and to test vaccines obtained by the autolysis of living bacteria or any other vaccine showing itself to be efficacious and free from objection.

Thirteenth: Among persons who may be designated as particularly to be benefited by antityphoid vaccination, the following may be enumerated:

- (a) Physicians, internes, medical students, male and female nurses in military and civil hospitals.
- (b) Persons members of families in which bacillus carriers have been demonstrated.
- (c) Young persons of both sexes who have come from salubrious regions in the country to cities which are habitual foci of typhoid fever.
- (d) The population of cities where the latter disease is frequent.
- (e) Soldiers and sailors (rank and file) sent either to Algeria or Tunis, or to colonies where typhoid fever is epidemic or endemic.

#### CONCLUSION.

Our general conclusion is derived from the long series of scientific observations which have accumulated during the last few years. These observations, made upon man, derive their value both from their number and their results. They are still further fortified by the unanimous indorsements in England, Germany, and the United States, by the highest and most competent medical authority of these nations.

This conclusion is as follows: *There are grounds for recommending the voluntary employment of antityphoid vaccination as a rational and practical method of diminishing, by a sensible proportion, the frequency and gravity of typhoid fever in France and in the French colonies.*

*This recommendation is addressed to all whose profession, whose usual or accidental methods of alimentation, whose daily or frequent association with the sick or with bacillus carriers, expose them to direct or indirect contagion by the bacillus of typhoid fever. (The conclusion, put to a vote, was adopted.)*

#### DIPHTHERIA AND THE USE OF ANTITOXIN

The death rate from diphtheria has been steadily declining ever since the discovery of antitoxin. Probably no fact of modern medicine is more incontrovertible. France has led the way and with its mortality rate the lowest of all the civilized countries of the world, takes unquestionable leadership among progressive nations. Her success, however, serves to put all the other countries to shame. If France can achieve such a distinctive triumph over one of humanity's dread diseases, other countries can do likewise. In the United States, failure to equal or still further lower the record of France points to two causes, both reprehensible in the extreme.

The first is failure to accept antitoxin universally as an absolute specific for diphtheria. It is inconceivable how any intelligent person—a medical practitioner especially—can deny the specificity of diphtheria antitoxin. One has only to compare the death rate without the use of antitoxin, with the death rate under its use, to receive incontestable evidence of the benefits that are certain from this absolute specific. To be sure, the tendency of the age is toward a declining death rate, irrespective of remedial measures. Any number of cities have reported during the past few years, lower death rates from all causes. Modern hygiene and sanitation are essentially accomplishing much in preventing mortality and promoting longevity. But in connection with no other disease is there such notable and absolute evidence of specific control by a definite remedy, as in diphtheria and its control by antitoxin. Consequently denial or repudiation of the effect of antitoxin is not only irrational, it is all too often simply blind prejudice. For a medical man to assume an antagonistic attitude to antitoxin comes perilously near to wilful negligence, and the time is close at hand when failure to use antitoxin will impose criminal as well as civil responsibility. This will remove not only the first cause of our present inability to equal or better the diphtheria death rate of France, but also the second and quite as important—the failure of the average American physician to use antitoxin properly. The French clinician employs antitoxin more promptly and heroically. He studies his patient, notes the particular virulence of each individual infection and adjusts the amount and method of use—frequency and so forth—accordingly. He has a wholesome fear of diphtheria, but not of antitoxin. He recognizes certain dangers—as part of all forms of internal medication—but knows that these are as nothing compared to the graver dangers of the disease itself. The antitoxin used by the French physician is no better or safer than that prepared in America;



indeed there are not a few reasons for believing that our American antitoxin is more potent, more uniform in unit strength and more free from by-effects such as rashes, etc. Therefore the American physician should entertain less apprehension in using antitoxin than his French confrere.

Unfortunately, this is not the case, and many American physicians, while believing implicitly in antitoxin, fall short of securing the results they should by reason of their timidity in the use of proper dosage. The unwarranted antagonism to antitoxin that has had widespread publication in so-called health journals, and in the literature of the health charlatans, has not only created false fears in the minds of the laity, but what is more serious and regrettable, has led innumerable physicians in spite of their scientific convictions to administer antitoxin with trepidation. In other words the bugbear of an occasional antitoxin eruption has obscured the infinitely graver dangers of diphtheria itself. It is high time that every intelligent medical man freed himself from the false fears created by those who, his judgment must tell him, are ignorant—or worse. One thing is certain, the American death rate from diphtheria will never be lowered to the point it should until American physicians use antitoxin as promptly and as freely as experience and the results justify.—*American Medicine*, Dec., 1910.

#### THE SPREAD OF SCARLET FEVER AND DIPHTHERIA IN SCHOOLS

The public, and most health officers, are inclined to consider the intercourse of children in schools as a common cause of the spread of these diseases. This view is encouraged by the fact that during the summer time, when the schools are not in session, there are usually much fewer cases than at other seasons of the year. English statistics published, year after year, particularly those of London, show that there is a decrease in the prevalence of scarlet fever and diphtheria during the summer vacation, which in England is only for four weeks in August, and that this is followed by an increase when schools open. It also appears that the seasonal variations are more marked in children of school age than in those younger and older. Kerr, the Medical Officer of Education of London, has given this subject much careful study, and his conclusions are not in accord with popular notions. In 1907 he had shown that a considerable part of the reduction in reported cases was due to the absence from London during the holidays of many children of school age. Thus the absence from London rep-

resented about 18 per cent. of the holiday period, which accounted for the larger part of the 29 per cent. reduction in scarlet fever and diphtheria. A more intensive inquiry, made in Battersea (London), in 1909, showed that many light cases are not seen by a physician, and are missed entirely during the holidays, but are during school time discovered by the "attendance officer," who visits the houses of the children to discover the cause of absences. These two causes, the absence of children from the city, and the "missing" of cases, seem to account for most of the apparent decrease in reported cases which occurs in the holidays. The increase in cases after the opening of school was shown not to be the result of school attendance. Thus the reported cases of diphtheria at school age in the first week of school was for all London 27, and for the second week 99. But these 99 cases were carefully investigated, and it was found that in 69 there had been no case of diphtheria in the school within one month. In fifteen instances there had been a case in the schools within one month, but none in the same class (room?) and no connection could be traced, and in some instances infection out of school was discovered. Two cases, sisters, in one school proved to be the cause of subsequent cases, and three other cases in one school were due to carriers. Thus the assumed excess of 52 cases due to school infection, an increase of practically 100 per cent. was shown by detailed study to be really 10 per cent. The three cases in one school were due to carriers, and Kerr suggests that a part of the increase in scarlet fever and diphtheria in the autumn may be due to the cumulative effect of "missed" cases occurring during the holidays, many of which cases, he shows, would have been discovered by the attendance officer if the schools had been in session.

Kerr has also shown that the diseases under consideration spread chiefly by contact infection, which is the view now generally held by health officials, and that the conditions for this contact infection are far less favorable in school than out. Twenty-six scarlet cases which had been attending school were only discovered when desquamating. Only two cases developed from these 26. The danger to be apprehended from infection of the schoolroom itself is practically nothing, and the routine disinfection "of unoffending tables, chairs and floors" is deprecated. In the 26 instances of scarlet fever cases in school mentioned above, disinfection was performed only twice, on request of the sanitary authority, and it happened that one of the two secondary cases was after disinfection.



A tabulation was made of the reported cases of scarlet fever and diphtheria in Providence among school children for the five years ending in 1908. This showed that scarlet fever exhibited a marked decrease in each year before the summer vacation, and that diphtheria decreased in three of the five years. In half the instances the autumnal increase in these diseases began before the schools opened, and in one other instance the increase of scarlet fever was delayed until a month after the opening of schools. As the beginning and the ending of the summer drop in these two diseases is thus shown to be independent of school sessions, there is no reason for assuming that the decrease is at all dependent on the closure of schools. A study of the curves indicates that the decrease of scarlet fever and diphtheria in the summertime is correlated with the temperature, but not through the schools.

A similar study of the seasonal distribution of all cases of these two diseases for the ten years ending in 1903 shows that the beginning and ending of the summer decline have no apparent causal connection with school attendance, as it usually precedes instead of follows the opening and closing of the schools. The relation is no more marked when school children alone are studied than when all cases are considered.

The period of incubation of scarlet fever and diphtheria is so short that if school attendance has any influence on the spread of these diseases it is not impossible that the short vacation of a week to ten days may have a noticeable effect. Indeed it is frequently alleged that such an effect is easily seen. But in Providence there was a decrease of these diseases 21 times in the week following the short vacation, an increase 20 times, and the number of cases remained the same 8 times. The study of school children alone, 1904-8, showed a decrease after the vacation 9 times, an increase 13 times and the same number of cases 4 times.

For the purpose of studying the incidence of these diseases in schools in Providence sets of cards are kept, one set for scarlet fever and one set for diphtheria, with a card for each school. On these cards is noted every case of the disease which develops in a pupil attending the school, and also every case of the disease which develops in the family though not in the person of a pupil. By this means any excess of the disease in a school is at once noted. In Brighton, England, a large chart is kept in the health office on which is noted against each school the cases of contagious disease therein occurring.

By these means it is found that outbreaks do occur in which cases of scarlet fever and diphtheria develop from contact in school, or per-

haps more often during recess, or while the children are coming or going. That a certain number of cases are reported among the pupils of a school does not necessarily prove that they have any relation to school attendance. An investigation of the cases shows that often they are, either certainly or probably, due to neighborhood rather than school contact. Yet school outbreaks do occur. During the past 26 years there have apparently been in Providence twenty such outbreaks of diphtheria and eight of scarlet fever.

Another reason for doubting that school attendance greatly influences the prevalence of scarlet fever and diphtheria is that these diseases are more common in children under school age than they are among those of school age. The following table shows the age distribution of the reported cases of scarlet fever and diphtheria in Providence for 21 years:

DIPHTHERIA—1889-1909.			SCARLET FEVER—1889-1909.		
Under	1 year.....	197	Under	1 year.....	264
"	1 ".....	491	"	1 ".....	528
"	2 ".....	738	"	2 ".....	891
"	3 ".....	795	"	3 ".....	1,097
"	4 ".....	813	"	4 ".....	1,090
"	5 ".....	764	"	5 ".....	1,171
"	6 ".....	775	"	6 ".....	1,141
"	7 ".....	665	"	7 ".....	1,027
"	8 ".....	565	"	8 ".....	868
"	9 ".....	463	"	9 ".....	713
"	10 ".....	371	"	10 ".....	577
"	11 ".....	333	"	11 ".....	418
"	12 ".....	285	"	12 ".....	362
"	13 ".....	200	"	13 ".....	245
"	14 ".....	147	"	14 ".....	227
"	15 ".....	119	"	15 ".....	149
"	16 ".....	105	"	16 ".....	128
"	17 ".....	94	"	17 ".....	121
"	18 ".....	79	"	18 ".....	74
"	19 ".....	67	"	19 ".....	69
"	20 ".....	79	"	20 ".....	58
Adults .....	1,219		Adults .....	640	
9,364			11,858		


It will be observed that the amount of disease increases until the first year of school attendance when it begins to fall off. It is remarkable if school attendance has sufficient influence to cause the autumnal increase in these diseases as is so often alleged, that it has not sufficient influence to at least keep up the disease after children reach the age when they begin to go to school.

While it appears to be true that the diseases under consideration rarely spread in schools, and that the schools are safer than the streets, yet a certain small amount of infection probably does at times take place in school. This of course should be guarded against by taking

every reasonable precaution. It is probable that the rules in regard to the school attendance of children from families where these diseases exist, are in most of our cities amply sufficient to prevent extension from reported cases. Indeed these rules are probably often unnecessarily stringent. Disinfection of the school is, generally speaking, a useless procedure. The trouble comes not from the recognized cases but from the "missed cases" and healthy carriers. How to discover these and what to do with them is an unsolved problem. It is true that the medical inspection of schools has resulted in the discovery of some cases that would otherwise have been missed, and that it is probable that the increasing interest of the teachers will discover more of them. But the carriers, and indeed some mild cases, are likely never to be discovered. To prevent harm from such it is necessary to reduce to a minimum the chances for the exchange of saliva and other secretions. The common drinking cup must go. The use of the slate encourages carelessness with the saliva. Each child should have its own pencil and they should not be exchanged. The roller towel is almost as bad as the common drinking cup. The teacher must teach personal cleanliness by precept and example. If she licks her fingers to turn over papers, or moistens her pencil on her lips, she is teaching the children to exchange saliva and inoculate themselves with diphtheria bacilli. The use of modeling clay and sand, and much other kindergarten work, encourages personal uncleanness and suggests that human secretions are in no way harmful. If, however, the child is taught to wash its hands, and wipe them on its own towel, before touching the clay, and to keep the fingers out of the mouth while modeling he will learn that it is wrong to inflict his own saliva on another. By such teaching the spread of contagious diseases in schools may be made even less than it is.—By Charles V. Chapin, Supt. of Health, Providence, R. I.—*American Journal of Public Hygiene*.

#### IF YOU WANT TO KNOW

If you want to know how it feels to be shunned as a leper, and hear people cry as they point their finger at you "unclean!" "unclean!" and rush off to have the State Board of Health come and get you and take you to the "pest house," and keep you there, and not let you get out, and have guards over you, and have scabs on your face, and hands, and feet, and scars when you get well—if you want to know how it feels, just don't get vaccinated, and you'll find out.

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# FLORIDA Health Notes

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*One ship drives east and another west,  
While the self-same breezes blow.  
It's the set of the sails and not the gales  
That bids them where to go.*

—John Burroughs.



### THE MOTE AND THE BEAM

A long time ago—in the dim and musty past—a speck of dust forced through a crevice of the window blinds, floated around a darkened room, lighting first on a chair, then on a table and finally found a resting place in a still more darkened corner. This tiny mote, although almost invisible to the human eye, was made up of myriads of disease germs, coming from a mass of filth and dirt, which a street sweeper had but a few moments before stirred up in passing up and down the street. By and by some one came in the room and partly squared the blinds letting in a stream of light which fell upon the little mote. "Ha, ha," said the Beam, "you are discovered, and must be gotten rid of. You are dangerous, might be breathed in the lungs of some one, and there is no knowing what then might happen to that unlucky individual." "Well, well," said the Mote, "could you but look backwards and see the countless number of atoms like myself which are dancing and sparkling in the wake of your streak of light, you might commence to find fault with your own self, before accusing me of wrongdoing, and—" But here the servant girl came in, and throwing open the windows, the beam of light disappeared and broom and cloth soon wiped out of existence the mote and her fellow atoms of dust. The contention between the two ended here, but the lesson of the incident has lived through succeeding ages.

To complain of the faults of other people and their lack of civic pride and proneness to indifference in sanitary matters, while at the same time their own commissions and omissions in these directions are staring them in the face, is to observe the *mote* and fail to see the *beam* of their own defects and mistakes. This evidence of frailty and weakness in human nature is not easily overcome because of an inherent tendency to selfishness which seemingly is born in and is firmly imbedded in the human race. Public officials encounter this peculiarity of mankind almost every day, and no class of officials more so than health officers and those who come in close contact with the public when dealing with methods and measures to restrain disease either in propagation or spread or when likewise endeavoring to correct nuisances which may be productive of disease or destroyers of individual comfort. Just why a housewife should think her neighbor has been guilty of gross carelessness and is culpable of sanitary neglect of her premises, and at the same time be totally oblivious to her own shortcomings in many unhealthful happenings about her own surroundings, can only

be explained by the proneness of mortals to be captious of the acts of others and blind to their own imperfections. Hardly a day passes but a letter is not received at the office of the State Board of Health particularizing some imagined sanitary violation of a supposed rule or regulation of the Board in regard to nuisances which may be detrimental to health. "My neighbor's horse died upon the public highway, not far from my residence; please send some one to remove it, as it smells badly," or "My neighbor keeps cows and pigs, which are a nuisance—at least I think so; please send some one to investigate," or "Over-ripe fruit is allowed to rot on station platform. Send some one to order it to be taken away," when if an examination of the back yards and premises of these same complainants is made they would show up tin cans half full of water, surface closets unscreened, and breeding flies by the millions, tank-cisterns unscreened, permitting mosquitoes to propagate by the billions, and an accumulation of trash and rubbish, which if not unhealthful emphasizes a decided lack of civic pride and self-respect. "Instead of writing to the Board of Health, of either State or city, that Mr. or Mrs. 'So-and-So' is maintaining a dirty back yard or is slothful in appearance of premises," says a writer, "when if he or she will look after their own premises, enclosures or homes; to sift out lapses and oversights, he or she would be doing the correct thing." For instance: Suppose diligent search is made at least once a week—daily would be better—for such things as may reasonably be considered contributing to unhealthy conditions, and then correct them. Clean up, not in a perfunctory manner, but thoroughly, by clearing away all tin cans, broken bottles or anything which may hold water, if only a tablespoonful, and cart such trash to the cremator or dump pile to be burned: the possible breeding places of mosquitoes may then be destroyed. Or again: Suppose the stable is kept scrupulously clean—if one is fortunate in having a horse—and the manure swept up and put in a fly screened bin, to be emptied and carted away and burned, at least twice a week, is not an effort being made to lessen the quantities of flies in the neighborhood?

Now, with mosquitoes diminished in number and flies driven out by suppressing their breeding places, the summer months in tropical latitudes can be made more salutary and decidedly more comfortable. Don't say, pray don't, "It is useless for me to look after these defects, when my neighbor is indifferent and careless." The Notes is talking now to every one within the sound of its voice or the sight of its writing, and who will read these lines; therefore, if each one will heed the advice there will be no neighbor to complain of. If each citizen will

do his or her duty in maintaining sanitary conditions in homes and about his premises, there will be no *Motes* and *Beams* to take notice of, or complain about.

### ALWAYS SO!

The ridiculous position in which the "antis" generally place themselves in assuming an immunity to disease would be grotesque were it not that there are many who without stopping to think for themselves are willing to be led by the high-sounding phrases and pretended knowledge of these charlatans. It will generally be found that when a man or a woman contends that vaccines of different character do not protect the individual against an attack of the disease for which special immunization is performed, they either contracted the disease themselves at some past period or are protected by the distinctive vaccination itself. Those who are loudest in their denunciation of vaccination as a preventive measure against smallpox are known to have been vaccinated in infancy or in early youth. Of course, such an individual can with perfect propriety and truthfulness state that he or she will not contract smallpox and that he or she has no fear of the disease, but in doing this they are, as Kipling very aptly puts it, "Twisting the truth to set a trap for fools," and are deliberately, and it may be said, with malice aforethought, leading unsuspecting and susceptible people into danger and perhaps unto death.

The following from an exchange tells a story which is of almost daily occurrence:

"A New Yorker of English origin has recently distinguished himself by a threat to shoot any physician who ventures to carry out the law and vaccinate his children preparatory to their entering one of the public schools. We are reminded that the *bona fides* of anti-vaccinationists are not always absolute. In the terrible epidemic of smallpox in Montreal in 1885, which was due in great part to the objection of a large illiterate population to submit to vaccination from motives mainly superstitious, a certain English speaking physician distinguished himself by his loud championship of the antis. The time came when it became necessary for this gentleman to make a business trip out of town. Like other travelers on the train he was requested to bare his arm, and, if unable to exhibit a 'good mark,' to submit to the lancet. Despite his protests and loud announcement of his name and carefully acquired reputation, the inspectors were firm, and up went the doctor's sleeve. What was the mingled feeling of amusement and disgust of the pas-

sengers to see upon the arm of this champion of liberty a superb vaccination mark certainly not over six weeks old!"—*American Medicine*, December, 1910.

### "BE PREPARED"

In one of the cities of the State, on one of the southernmost islands, on a certain Sunday of October, special services were conducted in one of the places of worship for the "Boy Scout" organization. It was an interesting service, consisting in a recital of the Scout vow, and the twelve points of the Scout law, which were given in unison by the two troops of Boy Scouts. The boys in their khaki uniform, with neatly tied cravats, and well brushed hair, and intelligent faces made a very impressive foreground to a picture which had as its setting the older members of the congregation and citizens of the island. Explanatory addresses of the purpose of the organization and its institution were made by the Scout masters, with a stirring appeal by the mayor of the town and the Scout commissioner for an earnest endeavor from the boys to carry into their practical life work the cardinal features of the Scout law. The motto of the Scouts is, "Be Prepared," and listening to the addresses the thought occurred and recurred, why should not this motto be altogether a suitable one for the sanitarian—the sanitary workers of the country. Watchfulness is an intrinsic attribute of an earnest endeavor to do right. Being prepared denotes a conception of vigilance at all times, and a readiness to meet difficulties and dangers that cannot be anticipated or foreseen. And coming face to face with obstacles, be they small or large, to be ready for the fight, if fight it be for the right, or by tactful proceeding turn what had the appearance of defeat to a masterful victory. The health officer, the advisor of the public in all matters relating to promoting and maintaining good health, has to be in a state of preparedness at all times, and there is no individual member of society who can appreciate this motto of "Be Prepared" more than he. Every health officer or member of a health organization is intuitively and by instinctive knowledge a "Scout." He or they may not go on "hikes" in the country to demonstrate his or their ability to cope with the material embarrassments of trying to live, but nevertheless there are demands upon them far more arduous and prolonged in tests of mental and physical endurance, in patient pleading and earnest coaxing with the people to conform to Nature's laws and so escape Nature's punishment.



### Dr. Walter Wyman

Surgeon-General Walter Wyman, of the United States Public Health and Marine-Hospital Service, died Monday night, November 20, 1911, in Washington.

Dr. Wyman was a little past sixty-three years of age. He had been in the Marine-Hospital Service since 1876, having been Surgeon-General since 1902.

In addition to the degrees A. B. and M. D., he has had the honorary degree of LL. D. conferred on him by the Western University of Pennsylvania and the University of Maryland.

Dr. Wyman was a man of strong personality and was the chief factor in bringing the United States Public Health and Marine-Hospital Service to its present high state of excellency.

The nation mourns the loss of one of its best men.

### THE VALUE OF A COUNTENANCE

We have heard it hinted that a certain citizen of the State has had his countenance injured by smallpox, for which he holds a certain railroad responsible, and has accordingly entered suit to have the same put in good repairs. He estimates the damage that his face has suffered at \$25,000, we have heard, and then again we have heard \$100,000.

This it seems ought to materially improve his countenance, if indeed not put it in first-class repairs.

The case promises to be an interesting one in that it will give the lawyers a chance to spar over the value of a countenance, and perchance may result in a court ruling that will fix the responsibility of protecting a valuable countenance against such untoward calamity. Such a ruling would be of vital importance, however much we might regret that it is to be had at such a cost. We would not predict that if such a high face valuation is approved by the courts that we will not only see hair and teeth for sale, but whole faces as well!

### DISTINGUISHED DOCTORS TALK ABOUT CHOLERA

New York, August 12.—Two distinguished physicians who testified at the State quarantine investigation today to their belief in the efficiency of Health Officer Doty, incidentally gave some interesting opinions regarding cholera.

Dr. William H. Polk, dean of the Cornell medical college, characterized fumigation as a useless sop to public superstition.

Dr. Simon Flexner, head of the Rockefeller institute of research, said he thought Dr. Doty's work at quarantine had set a new standard for the whole world. The danger from cholera did not come from developed cases that could be identified, he said, but from the cholera "carrier" whose identity could be discovered only through careful bacteriological examination. The cholera germ, he said, could be received only in the mouth.—*Times-Union*, August 13, 1911.

Dr. William H. Polk, dean of the Cornell Medical College, (Cornell is the State University of New York), "*characterized fumigation as a useless sop to public superstition.*"

Now, just what do you think of that?

Dr. Polk doesn't vend "opinions" but he is a man of knowledge. There is a difference.

### A NOT UNUSUAL OCCURRENCE

On October 28th the office was informed "that a disease, somewhat resembling smallpox, has broken out in" an East Coast community six miles distant from one of the prettiest towns in the State. The disease was confined at the time to negroes, some were quite ill; others had recovered. The Board was requested to take whatever steps were "deemed necessary in the matter." The local authorities, it was said, did not seem willing to do anything and the physicians who had attended the cases had stated an inability to make a positive diagnosis.

One of the Assistant State Health Officers was at once detailed to proceed to that point, make a diagnosis, and institute proper measures, if it was found to be a disease over which the Board has control.

In the assistant's report of findings and actions, this pertinent comment on facts is given:

"Three months ago this disease made its appearance; was diagnosed as chickenpox by a physician from a nearby city and also by a local physician. Upon investigation by me three well developed cases of variola (smallpox) were found, one a severe case, the two others mild. I understand from the citizens that quite a good many negroes have had the disease and recovered. The negro school was inspected but could find no cases. Succeeded in vaccinating five negroes. Vaccination was talked to all persons met with. The white people say they would rather take chances than be vaccinated. Presume they desire to become infected. As soon as a few cases occur among the whites no doubt they will awaken to the fact of its contagiousness among the Caucasian and will then submit to the protection.

"I placarded the two houses where the disease was found and instructed inmates as usual. Gave the local practitioner vaccine points and explained to him our mode of handling the disease; tried to impress on all that we would institute no quarantine by guarding and that the only protection we would guarantee would be to submit to successful vaccination."

### FORMALIN POISON FOR FLIES

Formalin is a very successful poison for flies in spite of many reports to the contrary. I have recently used it extensively with excellent results, and have induced many of the Raleigh people to use it also, and practically all of them are having great success. The method that I have found most successful is the use of formalin in milk in the following proportions:

1 ounce (two tablespoonfuls) of formalin.

16 ounces (one pint) of equal parts milk and water.

In this proportion the mixture seems to attract the flies much better than when the formalin is used in sweetened water, the method that has usually been recommended. The formalin-milk mixture should be exposed in shallow plates—a pint will make five or six plates—and by putting a piece of bread in the middle of the plate, it furnishes more space for the flies to alight and feed and in this way serves to attract a greater number of them.

I first used this poison in a milk room where the flies were very numerous, and poisoned over 5,000 flies in less than twenty-four hours, on several different occasions. Over a pint of flies were swept up in this room each time the poison was used. Another very conclusive test was made in a large calf barn where flies were extremely numerous. I exposed six ordinary size plates of the formalin poison mixture and killed about forty thousand (four quarts of flies), between 12 o'clock noon, and 8:00 the next morning. This is only an illustration of what can be done by the use of formalin around stables where the flies are breeding.

I could cite a number of cases where the formalin poison mixture has been used in unscreened kitchens and dining rooms and resulted in killing practically all of the flies.

A good place to use this formalin is on the front and back porches, where flies are frequently numerous, waiting to enter whenever the doors are opened. I know several people who are using it successfully in this manner.

Formalin costs only fifty cents a pint at retail price. This shows that the treatment suggested is cheap as well as effective. It is true that there are some more or less successful fly poisons on the market, but nothing as cheap and effective as formalin.—*Prof. R. I. Smith, Entomologist, N. C. Agricultural Experiment Station, in Bulletin N. C. Board of Health.*



## "BABY BYE"

(Many years after) Theodore Tilton.

Baby bye,  
Here's a fly,  
Let us watch him, you and I.  
How he crawls  
In the stalls  
'Thout his overalls.  
I believe on those six legs  
Clings the filth of garbage kegs.  
There he goes  
On his toes  
Soiling baby's nose.

Mouldy bread  
On his head,  
Poisons on his back are spread.  
That small speck  
On his neck  
Tiny lives would wreck.  
I can show you, if you choose,  
Horrid germs upon his shoes—  
Three smirched pairs,  
Laden hairs,  
All his life he wears.

Black and brown  
Is his gown  
Though he wears it upside down  
You can see it is he  
Wears malignancy.  
He goes crawling in the street  
Gathering foulness on his feet,  
Then tonight  
He'll sleep tight  
On your wall so bright.

Soon he'll fly  
Low and high,  
Lighting on the food nearby,  
Leaving dust,  
Yes, he must  
Poison every crust.  
Now, does baby understand

Dirty flies shan't kiss her hand?  
Near the crumb  
On her thumb  
He should never come.

Catch him? Yes,  
There's one less,  
We don't want him on your dress.  
He's a foe,  
That is so,  
Everyone should know.  
Do you see his wings of silk  
Waving in the baby's milk?  
That won't do,  
Shoo, fly, shoo.  
There, I've killed but two.

Flies can eat  
Bread and meat,  
But they're very far from neat.  
Nor shall we  
Fail to see  
That the fly must flee.  
Tongues to talk have you and I,  
We must talk about the fly,  
Raise a din,  
Work and win,  
To delay is sin.

Kill the fly,  
Let him die,  
Leave him not to multiply.  
In and out  
They gad about,  
Seeking food, no doubt.  
From unsanitary homes.  
To our own he often roams.  
Put up screens,  
Try all means,  
Health upon this leans.

MRS. W. S. BRANCH.  
Orlando, Fla.

## CHANGES IN PERSONNEL

On October 9th Dr. Chas. F. Dawson was appointed Veterinarian of the State Board of Health, effective November 1st, vice Dr. R. M. Buffington, whose resignation had some weeks before been accepted.

Dr. Buffington has accepted an appointment as Veterinarian in the United States Army, and his first post of duty is Fort Barrancas, near Pensacola.

Dr. Dawson will be well remembered by the citizens of Florida as the Veterinarian of the University of Florida when that institution was located at Lake City. An arrangement at that time between the University and the State Board of Health was made, whereby Dr. Dawson was engaged by the Board as its Veterinarian at such times as this service was necessary, this dating from May 20, 1904. Upon the abolishment of the University at Lake City and its removal to Gainesville, Dr. Dawson was appointed a regular attache of the State Board of Health. He then served the Board as its Veterinarian until March 20, 1907, when he went to Delaware to take up the duties of Veterinarian at the Delaware College Agricultural Experimental Station, which appointment he has now resigned to again enter the service of the State Board of Health of Florida.

The Board is very fortunate in securing the services of Dr. Dawson to care for the rapidly increasing activity in the Veterinary Division of its work.

On November 9th Dr. F. W. Wilcox, of St. Petersburg, was appointed Agent of the State Board of Health for that western portion of Hillsboro County known as the Pinellas Peninsula, vice Dr. C. R. Wilcox, resigned. By a recent vote of the electors of that section of Hillsboro County, the new County of Pinellas has been created.

## WEEDS DO NOT BREED MOSQUITOES

How long! Oh how long, before it will be understood that weeds do not breed mosquitoes!!! Can't that simple fact seep in? After all these years of hammering is it possible that there are still people that pass for intelligent who haven't learned any better? No wonder hookworms prevail when they have such soil! Arise, ye sleepers, throw off "This lethargy that creeps through all thy senses," and learn for once and all time that WEEDS DO NOT BREED MOSQUITOES! CATCH ON?

## WHOLE FAMILY SICK

The following telegram was received, and marked urgent:  
"State Board of Health,

"Jacksonville, Fla.

"Please send hog cholera treatment for twenty and hookworm treatment for five. Whole family sick."

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